

ir Chute Co., Inc., at Buffalo, N. Y. office and factory. bouses its main New modern, daylight structure of the Irving This building houses its main



SAFETY PARACHUTES FOR AEROPLANES, BALLOONS, DIRIGIBLES

THE STANDARD EQUIPMENT FOR UNITED STATES ARMY, NAVY, MARINE CORPS; BRITISH AIR MINISTRY; MANY OTHER GOVERNMENTS AND NUMEROUS COMMERCIAL COMPANIES THROUGHOUT THE WORLD.

MANUFACTURED BY

IRVING AIR CHUTE CO., INC.

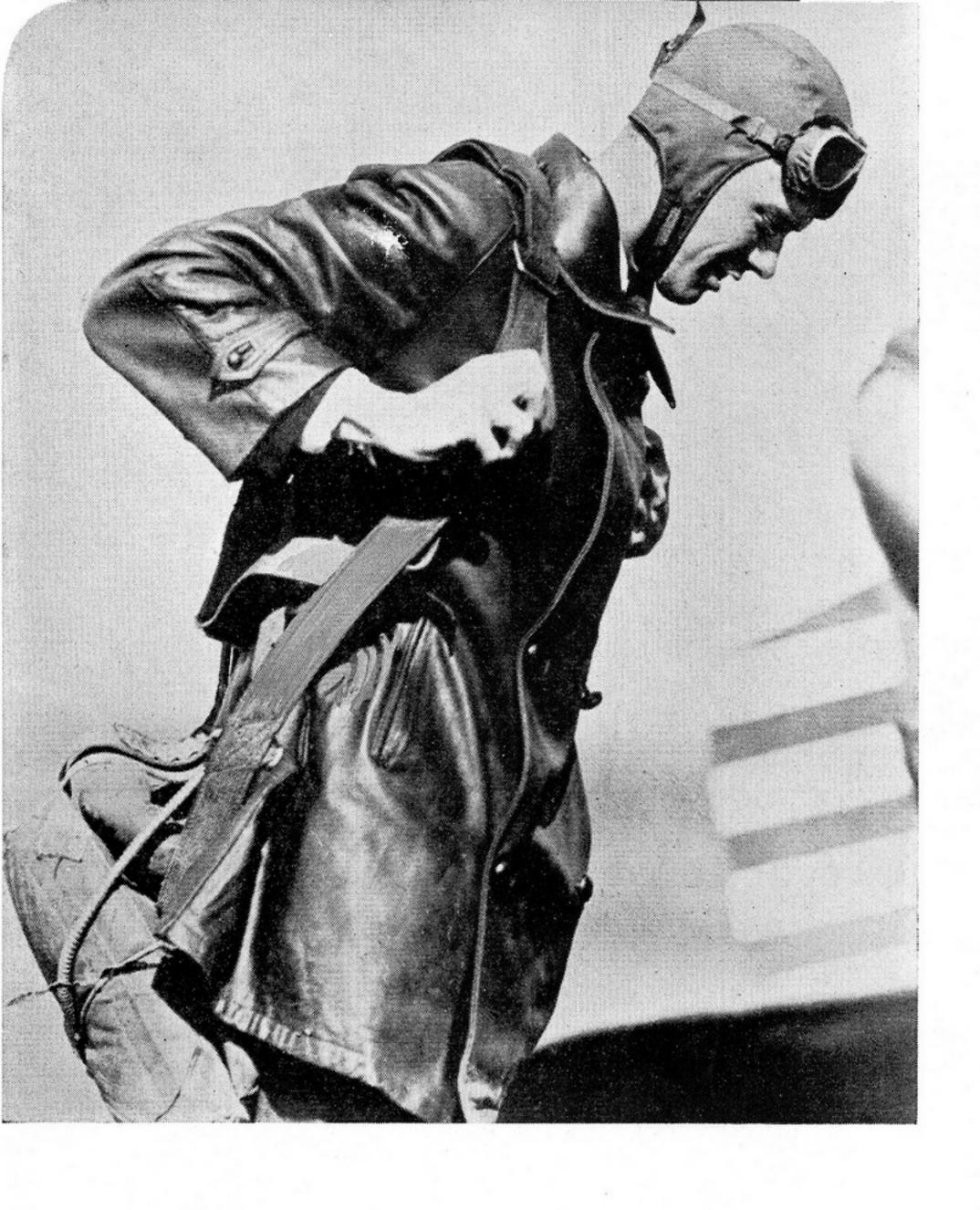


Main Office—

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Factories-

BUFFALO, NEW YORK; FT. ERIE, ONTARIO, CANADA; GLENDALE, CALIFORNIA; LETCH-WORTH, HERTS, ENGLAND



Col. Charles A. Lindbergh . . .

Leading member of the Caterpillar Club*, that organization composed of aviators who have been saved to life and service through use of IRVIN Air Chutes. Col. Lindbergh, prior to his Trans-Atlantic flight, had been saved on four different occasions by use of his IRVIN Air Chute.

IRVIN—"Symbol of Safety"

THE IRVIN Air Chute has been developed and perfected to fill the urgent need for a reliable and practical life-saving means for use from lost or disabled aircraft, and is the result of many years of research and test by both the Engineering Division, United States Air Service, and the Engineering staff of the Irving Air Chute Company.

Although the parachute itself is not a modern invention, it is only within very recent years that the freely practical "Irvin" type, combining every safety device, has been developed, perfected, and made generally available.

As a matter of fact, the Montgolfier Brothers, who invented the balloon in 1783, also experimented with parachutes, using sheep to test the safety of their apparatus. There is a record dated 1797 concerning the exploit of a man named Garnerin, who made a safe descent by parachute from a balloon. He repeated this success in England in 1802, jumping from a height of 8,000 feet. His parachute was suspended in folds from the basket of the balloon and not packed neatly in a container, as is the modern type. It had no air vent which is necessary to prevent oscillation and therefore Garnerin's descent was most unpleasant both for himself and for those who watched him.

However, little progress was made in perfecting the parachute as an infallible life-saver until the avoidable wastage amongst aviators during the last European War drew the attention of the authorities to the need for such equipment to be designed as accurately as the aircraft and engine themselves. Many inventors took the field, both in America and Europe, among them being Leslie L. Irvin, who entered the competition organized by the United States Government during 1918. He had made many successful jumps from balloons and aeroplanes before turning his attention to the different problems of getting clear from a disabled areoplane.

Obviously, a parachute attached to the aeroplane or loosely folded in a sack was of no value to the occupant of a fast-moving vehicle when not under the pilot's control, and until the manual or free type of parachute was designed, no progress was made toward the essential reliability of a life-saving parachute. The Irvin type invention was a "Free Type"

Col. and Mrs. Lindbergh, IRVIN-equipped, off on another flight

Col. and Mrs. Lindbergh enjoyed the utmost confidence when performing their trail-blazing long-distance flights by entrusting their lives, in case of emergency, to the time-proven security of IRVIN Air Chutes.



parachute, so-called because it was carried complete in one unit, attached to the body of the wearer. It was also a "Manually Operated" type, being opened at will by a pull on the ring located at a readily accessible place on the outside of the harness.

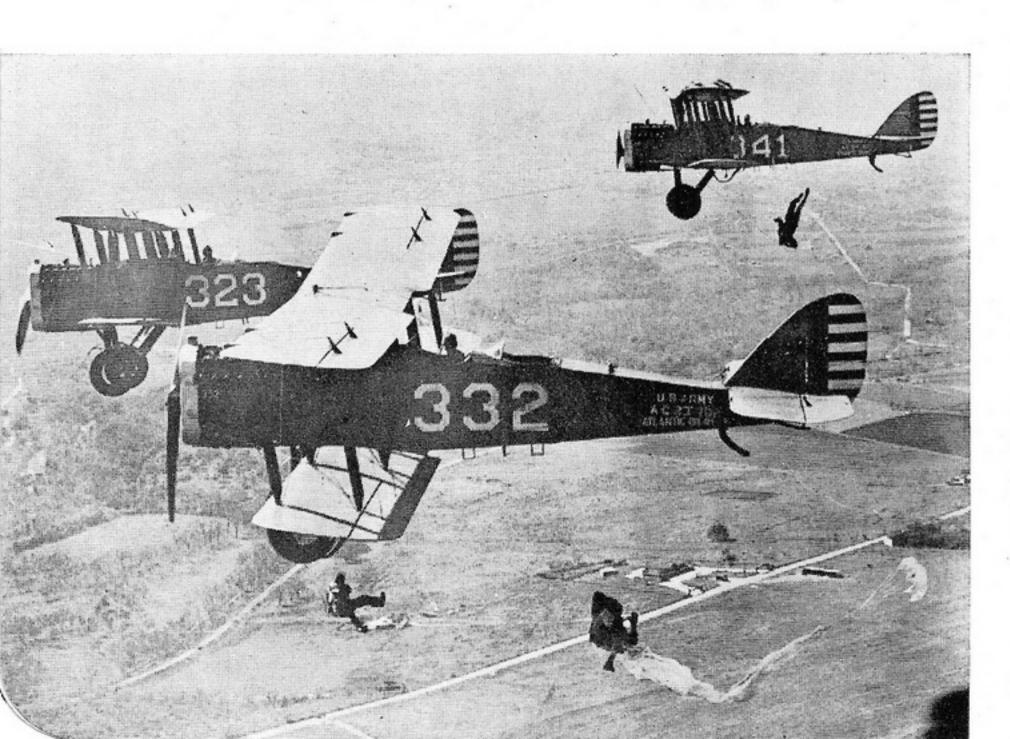
From its inception the Irvin Air Chute incorporated many original features. Its advantages over other types were tabulated to form the test to which any competing type should be subjected before approval. No other type has succeeded in equalling the Irvin in performance, which explains its ascendancy throughout the world. Thus has the Irvin Air Chute become the veritable "Symbol of Safety" on every flying field of the world. It is indeed in regular use in no less than 42 countries, in most of which it is the standard equipment of the Naval and Military flying services, including the Air Forces of the United States, the British Empire, Russia, Poland, Roumania, Yugo-Slavia, Spain, and many others.

Today, life-saving in the air has become universally recognized to be of the utmost importance, not alone from a humane—but also from a practical and financial viewpoint as well.

It is realized that whenever an aviator's life is saved in an accident which results from a matter of design or imperfection in construction of aircraft, he can report the points learned to the engineers most interested, who are then enabled to make corrections and improvements which might otherwise remain unknown. This has indirectly resulted in saving many other lives.

Saving of life also means saving of money to the Government, as the cost of training a military aviator is considerable in both money and time.

The IRVIN Air Chute, which is recognized throughout the world as being the most reliable, practical and safest equipment of its kind in existence, is also the least expensive, due to its long life. Many IRVIN Air Chutes that are over ten years old are still in service and in perfect condition.



Early use—U. S. Air Corps Aviators in "Free Drop" from cockpit

Note aviator in right foreground and how 'Pilot Chute' holds top of Air Chute out into line of flight, regardless of the position of his body as he falls through space. When flying was young

—Lt. Walter Lees, U. S.

Air Corps, O. R. C.

Life saved with IRVIN Air Chute on June 13, 1924, when controls failed at the extremely low altitude of 150 feet.



Parachute Performance

The need for such aerial life-saving equipment was first seriously felt during the latter part of the World War and was considered of such importance by the United States Air Service that a Board of Aeronautical Engineers was appointed to study all existing types of parachutes. After thorough investigation and exhaustive tests this board selected and developed the type most suited to their needs.

At this time the IRVIN Air Chute, already recognized in the United States as a reliable and practical safety parachute, was submitted for test, as well as were a great many other types of parachuites.

All types were tested to destruction to bring out their weak points. The tests were undertaken in a most thorough manner and under conditions such as might arise in actual service emergencies in order to determine definitely what were the chief points to be considered in parachute equipment and were undoubtedly the most exhaustive tests ever conducted to choose the best type of parachute.

As a result of these tests the IRVIN AIR CHUTE type was found to contain ALL THESE IMPORTANT FEATURES and this was adopted as standard equipment for the United States Air Service early in 1919.

The resulting specifications have now been widely accepted as the practical standard of required performance for all parachutes and are embodied in the following eleven points:

- 1—It must be possible for the aviator to leave the aircraft regardless of the position it might be in when disabled.
- 2—The operating means must not depend on the aviator falling from the aircraft.
- 3—The parachute equipment must be fastened to the body of the aviator at all times while in the aircraft.
- 4—The operating means must not be complicated or liable to foul and must not be susceptible to damage through any ordinary service conditions.



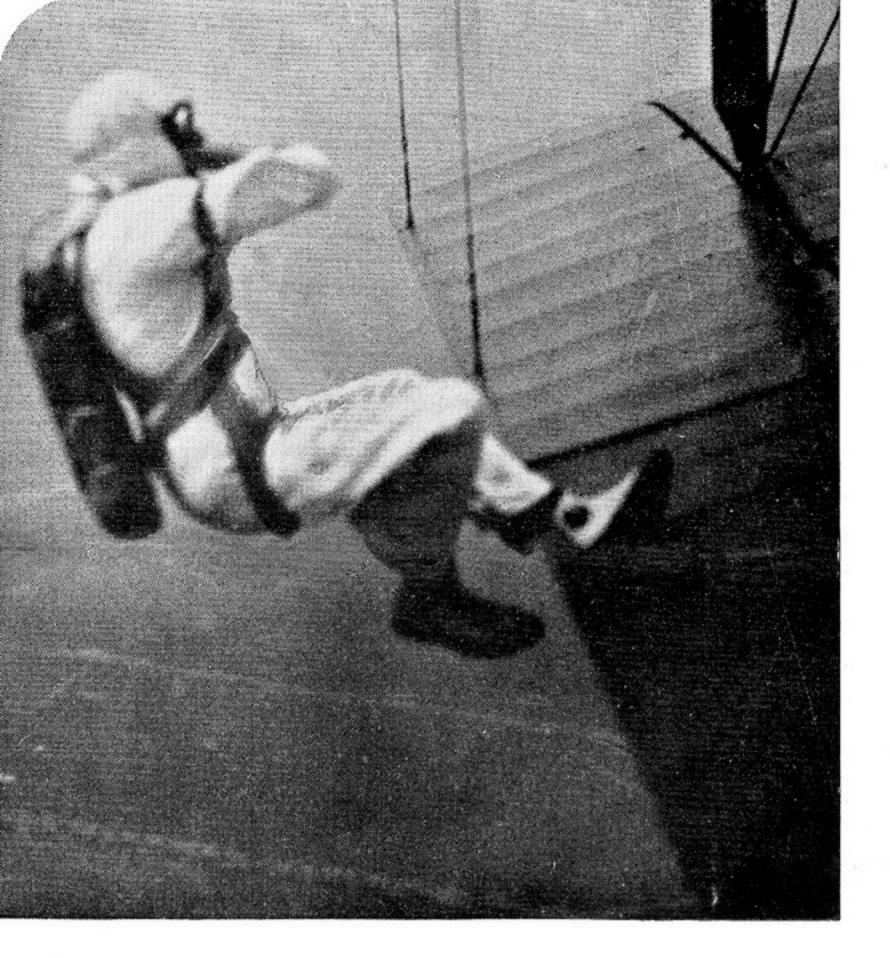
Royalty relies on the IRVIN Air Chute

H. R. H., the Duke of Windsor, equipped with IRVIN Air Chute, entering his plane on a return flight to England, after a big Game Hunt in Africa.

- 5—The parachute must be of such size and so disposed as to give maximum comfort to the wearer and permit him to leave the aircraft with the least difficulty or delay.
- 6—The parachute must open promptly and must be capable of withstanding the shock incurred by a 200-pound load falling at a speed of 300 miles per hour.
- 7—The parachute must be steerable to a reasonable degree.
- 8—The harness must be comfortable and very strong and designed so as to transfer the shock of opening in such a manner as to prevent physical injury to the aviator. It must also be sufficiently adjustable to fit the largest and smallest person.
- 9—The harness must be so designed that it will prevent the aviator from falling out when the parachute opens, regardless of his position in the air, and at the same time it must be possible to remove the harness when landing in the water or in a high wind.
- 10—The strength "follow through" must be uniform from the harness to the top of the parachute—bearing in mind the old axiom—"No chain is stronger than its weakest link."
- 11—The parachute must be so designed that it can easily be repacked with little time and labor.

No detail of the IRVIN Air Chute has been left merely to theory. Since its first adoption, many improvements have brought it to its present form, universally recognized as the most reliable parachute made. Its practicability and superior design, construction and method of operation have been demonstrated beyond the shadow of a doubt by the actual saving of over 2,000 lives in all parts of the world in every kind of weather and in emergencies covering practically every form of accident, such as wing collapse, collision, control failure (even at such a low altitude as 150 feet), engine failure during a night flight with no proper landing place, catapulted from aircraft while flying at high speeds, when lost in a fog, as well as spins, nose dives, etc.

Mass Parachute Jumping. One European nation illustrates the training and preparing for the probable mass use of parachutes in future military operations.



"Jump-Off" from Wing of Airplane

Note right hand about to pull Rip-Cord. Back pack has not yet opened. In emergency, if necessary, aviator can make long "free drop" away from plane before opening his IRVIN Air Chute.

IRVIN AIR CHUTE Operation

The IRVIN is a Free Type," "Manually Operated" parachute.

It is termed a "Free Type" parachute because it has no attachments whatever to the aircraft and operates entirely independent of the aircraft. It is carried complete in one unit and is strapped to the wearer or carried in some position from which it can be detached instantaneously, and fixed positively to the harness, always worn in flight, so that in an emergency a drop or jump can be made from any outlet that is easiest and most convenient. No avenue of escape is thus cut off as in the case where parachutes are attached to some part of the aircraft, or where their means of operation depend on some attachment to the aircraft.

It is termed a "Manually Operated" parachute because the aviator operates the Air Chute at will by a slight pull on the "Rip-Cord" which is located in a readily accessible place on the harness.

With this method of operation the Air Chute can be released with safety as soon as the aviator finds himself free from the aircraft. All that is necessary is a pull on the "Rip-Cord." However, the Air Chute need not be operated immediately. If he so desires, or conditions require it, such as if there is burning wreckage or any danger that the aircraft is falling in the same line as the aviator, or, in time of war, if there is a risk that he will be followed down by enemy aircraft, he can make a long "free drop" before opening his Air Chute. The design and construction of the harness prevents any bodily injury from the opening shock. Several

thousand such drops have been made successfully, including delayed openings up to from as much as five miles in height.

Such a delayed opening assumes that there is sufficient altitude for this maneuver. Where undertaken, it is of interest to record that a man of average weight reaches his terminal velocity of not more than 120 miles an hour after falling 1,200 feet, which occupies a time of approximately 11 seconds. The rate of fall thereafter is fairly constant, varying according to the position of the individual. There is no tendency to become stifled or lose consciousness during a delayed drop and, therefore, the action of pulling the "Rip-Cord" to open the Air Chute can be delayed until the aviator is within a few hundred feet of the ground if such a course is essential.

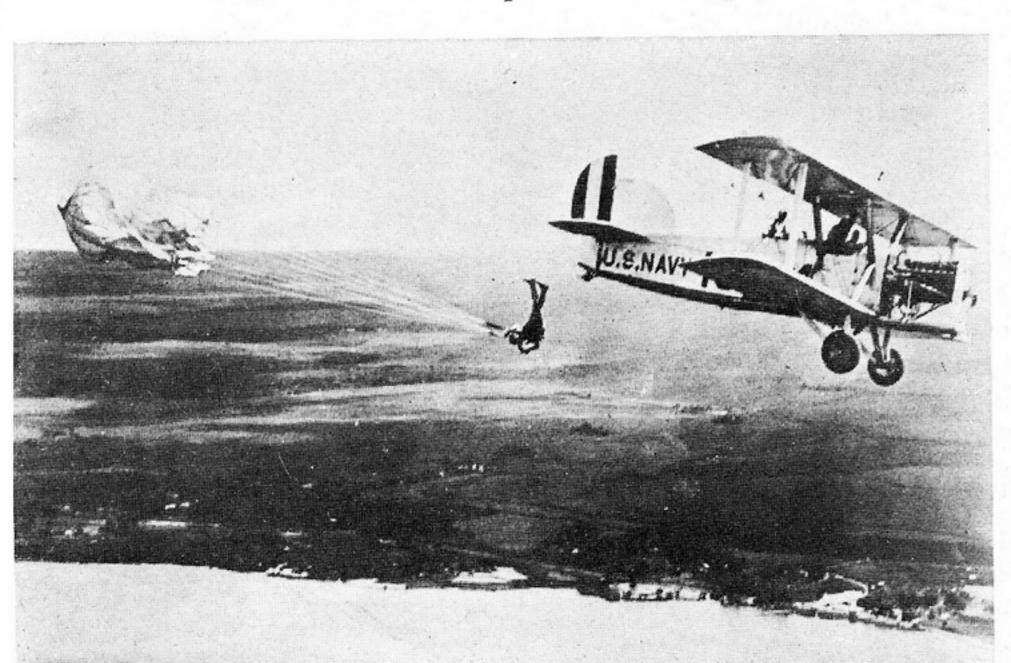
Ordinarily, other conditions permitting, it is usually better practice to bring the Air Chute into operation as soon as possible after leaving the aircraft in order to prepare for the landing.

The advantages of this method of operation, especially for military aviators, are nevertheless clearly apparent. Caution: as important as this technique is becoming in military actions, it should nevertheless be clearly recognized that long free falls, with delayed operation of the chute at heights of less than 1000 feet above the ground, require specialized training in this particular in order to accurately judge the proper distance at which to release the chute.

The average time required for the Air Chute to completely open and assume normal descent is approximately one and three-fifths seconds after the "Rip-Cord" has been pulled. It withstands the shock of a 600-pound load when released at 100 miles per hour and withstands the shock of a 200-pound load at a speed of 300 miles per hour.

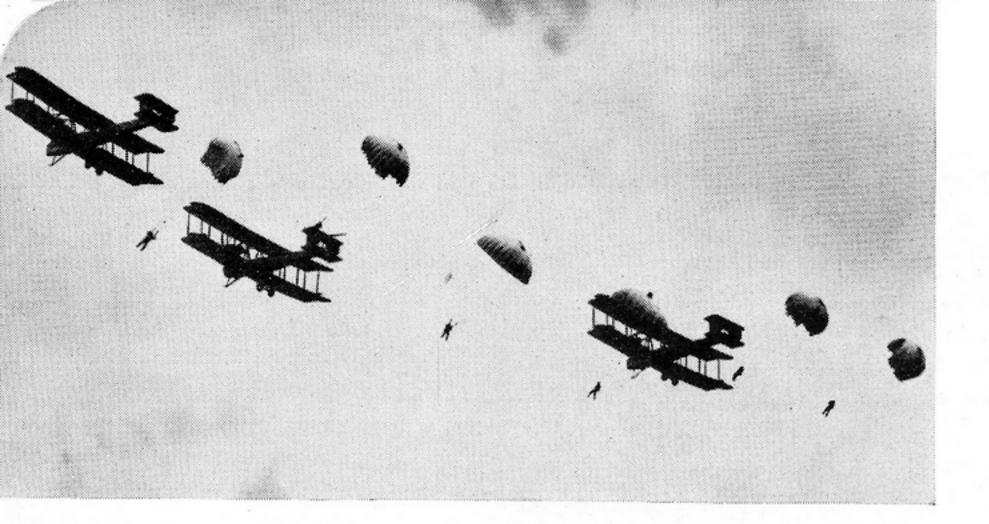
In addition to saving many lives in emergencies, which is the supreme test of any life-saving equipment, the IRVIN Air Chute has further demonstrated its remarkable performance without failure, in thousands of tests conducted under conditions simulating those that would be encountered in actual service. Over 150,000 "live" drops have been made with the IRVIN type parachute with which have been established all parachute records.

Following its use, the Air Chute is easily folded and packed in its container without special tools or equipment.



"Lift-Off" from Navy Plane over Pearl Harbor, Hawaii

By this method, the individual climbs out on wing, pulls Rip-Cord and parachute opens, lifting him off into space.



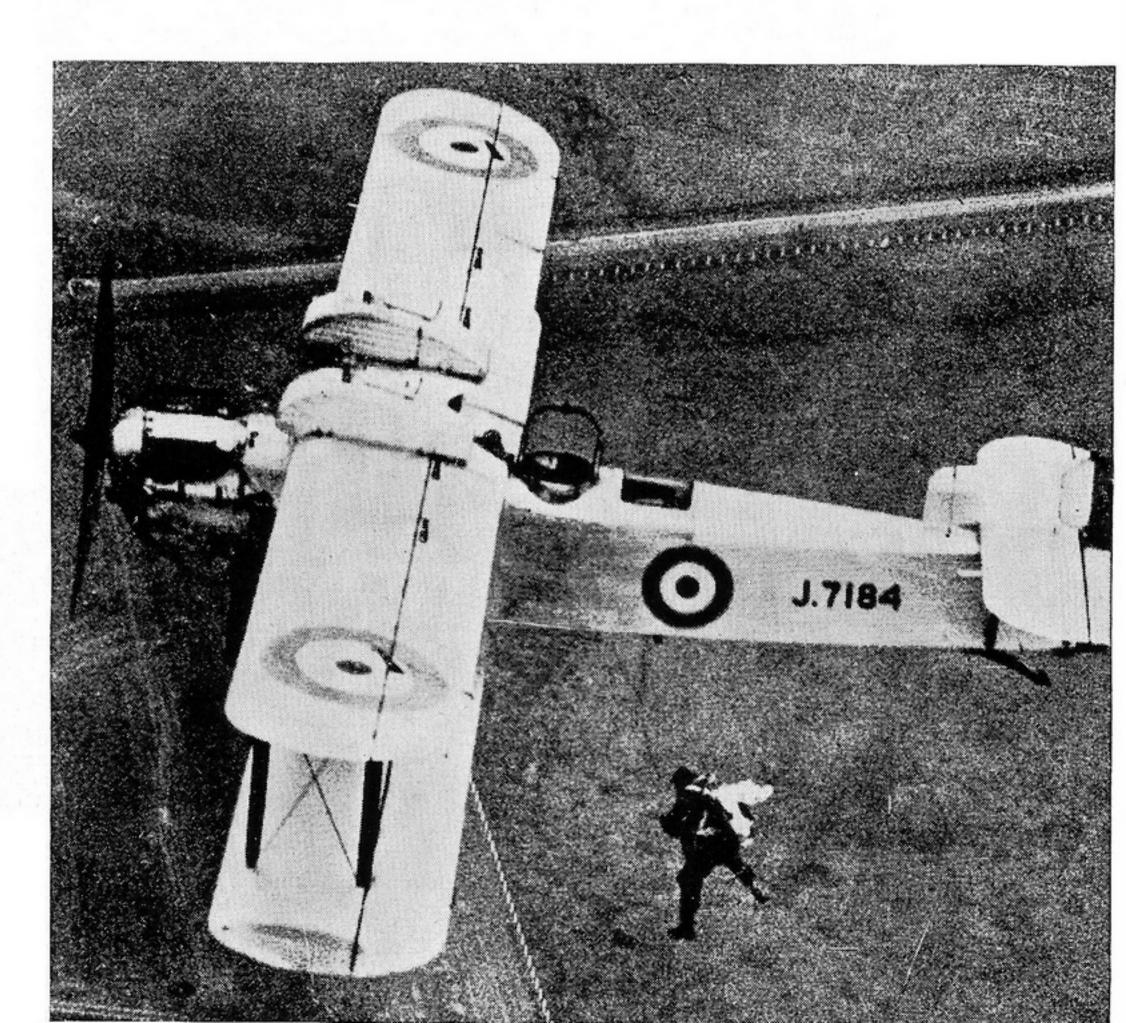
Standard Equipment for Years — IRVIN Air Chutes in Action.

Six members of the British Royal Air Force make exhibition jumps simultaneously from bombing planes. IRVIN Air Chutes are standard equipment for all British Air Forces.

Training or Exhibition Descents

When practising or making descents in training or for exhibition purposes the "lift off" method may be used to get clear of the aircraft. The aviator takes up his position at some point on the wings before jumping, taking care to be far enough outboard to clear the tailplane and any other obstructions directly in the rear. When the "Rip-Cord" is pulled the Air Chute spills out and the force exerted by the air on the Chute is sufficient to "lift off" the wearer, pulling him to the rear and in the line of flight.

This method is used by the Air Forces of many Governments to familiarize their personnel in the use of IRVIN Air Chutes.



Individual Training
Jump with IRVIN
Air Chute

Close view of jumper just after leaving cockpit in rear of training plane. Note parachute canopy about to open.



Experimental Jump from Transport Plane by U. S. Navy

United States Navy aviators jumping from transport airplane near Washington, D. C., in experiment to determine how quickly in emergency such a plane could be emptied. One aviator is falling, another can be seen following through doorway, with remainder in transport ready to follow in quick succession.

Jumping Clear

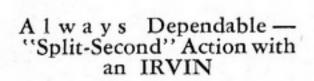
No rules can be drawn up on the best method of jumping clear from a disabled aircraft. One thing must be remembered always, "get clear of the aircraft before pulling the Rip-Cord". Nevertheless a study of the occasions that have brought into existence the Caterpillar Club (see pages 33-56) show a surprising number of lives saved in most difficult predicaments and by persons, both men and women, with no previous parachute experience, some of whom indeed were wearing chutes for the first time.

Pulling the "Rip-Cord"

At no time whatever should the "Rip-Cord" be pulled except after jumping or when entirely clear of all parts of the plane.

To insure this primary safety consideration, the user should never take hold of the "Rip-Cord" in the ship and only grasp it after having jumped free, entirely clearing all parts of the plane.

Then, a simple, quick pull on the "Rip-Cord" handle, immediately releases the parachute into instant operation.



IRVIN Air Chute instant after pulling Rip-Cord, which can be seen in aviator's right hand. Note orderly arrangement of suspension lines within the container. These pay out in proper sequence as the parachute opens.

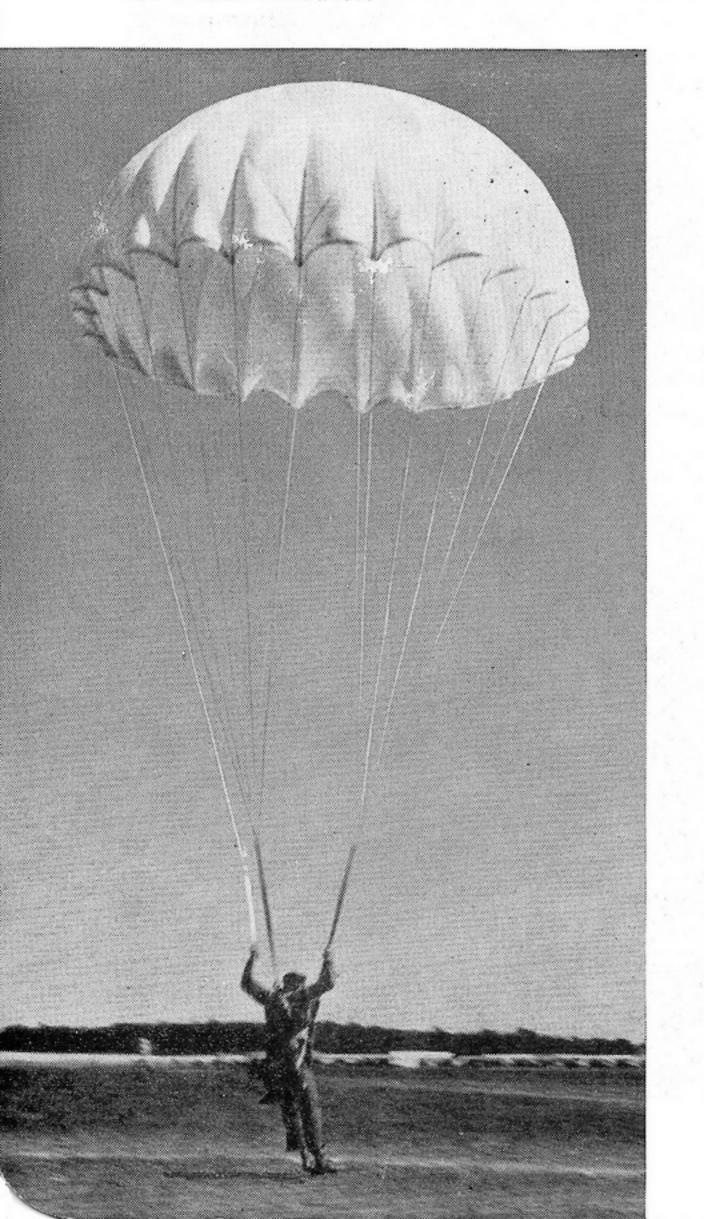


Position During Descent

The aviator will find that his natural position in the harness is similar to that of sitting in a swing. When too far forward for greatest comfort, position can be improved by placing the thumbs in the seat strap beside each leg and pressing downward, thus pushing the body upward and back into the harness. A movement in the other direction is equally simple.

Side Slipping

It is possible to change the gliding angle of the Air Chute by side slipping, if there is any danger of landing on obstructions, such as buildings or trees. The rate of descent is increased, so that this maneuver should not be attempted close to the ground, except as a last recourse.





Facing Direction of Drift

It is advisable to face the direction of drift during descent, as a better landing can thus be effected. To do this, grasp the risers above the head, lift your body and then sharply turn it in the direction you wish to turn, then release the risers, dropping your weight which rotates the Chute in that direction. As in side slipping, this should not be attempted too close to the ground.

Landing

Flex the knees slightly but not too much, relax, land limber and loose—and don't try to stand erect but let the body follow its natural tendency of direction and motion as you contact the earth.

In picture at left, note how gently the aviator's feet touch the ground. The patented IRVIN Harness permits him to further ease his landing by grasping the harness webs over his head and pulling against the canopy as his feet touch ground. Thus, the IRVIN Air Chute provides an easier landing than other parachutes with a canopy of the same diameter and rate of descent.

IRVIN AIR CHUTE Types

The design and construction of the IRVIN Air Chute is the same for all sizes, although it is packed in various types of containers worn on various parts of the body.

Canopy Sizes

To meet various requirements, IRVIN Air Chutes are made in two sizes as follows:

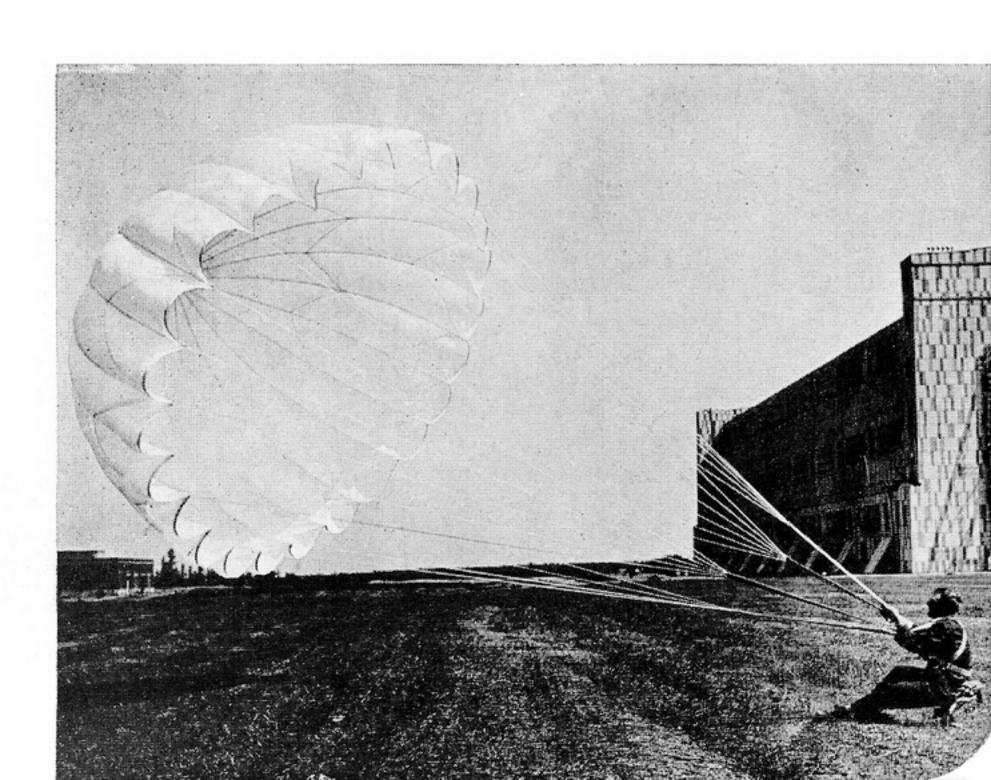
24 FEET in diameter, for general service use.

28 FEET in diameter, for exhibition and training jumps.

The 24-FOOT AIR CHUTE is the standard for general service use, due to its moderate rate of descent combined with its small and compact size. This has been adopted by many governments as standard equipment for their Air Forces.

It is known as the "Service Parachute" and is packed in five types of containers, namely the "Seat Pack," "Straight Back Pack," "Form-Fitting Back Pack," "Quick Connector Pack" and "Chair Chute". (See pages 17 to 28). This size of CHUTE, complete with harness and any of the types of containers mentioned, weighs approximately eighteen pounds. The average rate of descent is but 16 feet per second.

The 28-FOOT AIR CHUTE, ordinarily manufactured in the "Straight Back Pack," if so desired may also be supplied in any of the other packs. This, having a slower rate of descent, is especially for use in exhibition and training jumps and as the regular service parachute in some countries having flying fields at extremely high altitudes. Its average rate of descent is but 12 feet per second.



Inflated "Canopy"...

Showing a demonstration of an open canopy in a ground wind.

Materials and Parts

The FABRIC used in the Air Chute body is a high grade silk that has been developed by the Irving Air Chute Company after extensive scientific research and tests to determine what fabric was best suited to withstand the severe strain likely to be encountered in service emergencies. Being pure silk, without any artificial loading, this special fabric affords the greatest possible strength per unit of weight. Also, being entirely free of all substitute materials, it is subject to the least active deterioration with resulting long life qualities.

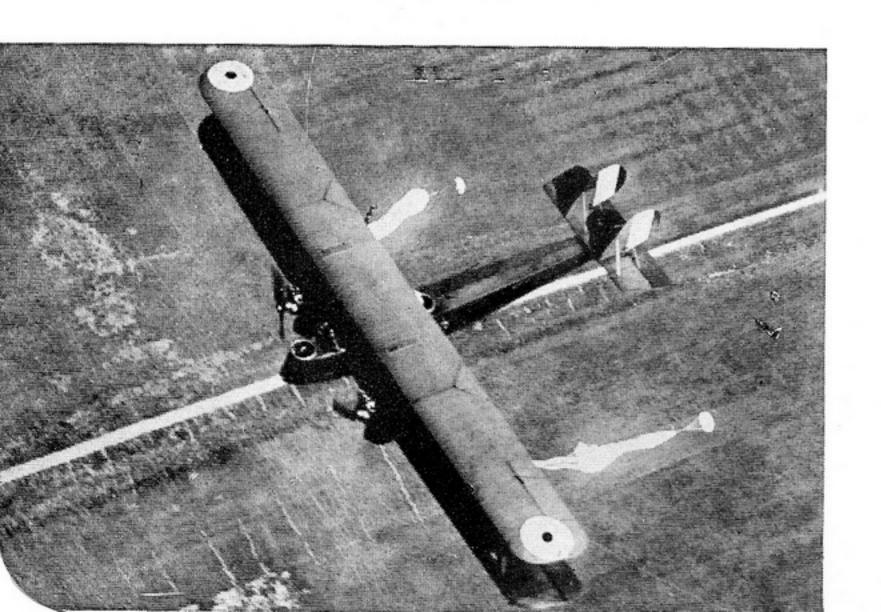
VENTAGE is taken care of by the proper weave of the silk fabric in conjunction with a vent incorporated in the apex of the Air Chute.

The SUSPENSION or shroud LINES are silk cords of 500 pounds tensile strength. These cords are continuous from their point of attachment on one side of the harness to the other, passing through and over the top of the Air Chute. Their entire length is free from knots and splices.

This form of suspension results in a net-work of cords which give great body strength to the Chute itself.

The WEBBING, used in the harness, is specially woven from pure linen yarns to give proper body to hold its shape while at the same time being sufficiently pliable and of adequate tensile strength to provide a high safety factor under the most severe loading conditions.

The METAL PARTS are the snaps, connectors and adapter buckles used in securing the harness and adjusting it to the size of the aviator. They are nickel steel with a tensile strength well over 5000 pounds, and are either chrome or cadmium plated.



U. S. Aviators Demonstrate Double "Lift-Off"

Showing action of IRVIN Air Chute at instant Rip-Cord is pulled. Note how "Pilot Chute" holds top of Air Chute out into line of flight, thus effectively preventing any possibility of entanglements and eliminating any chances of aviator falling into the Air Chute as it unfolds and opens.

From the first, this method of jumping has been employed by the Air Forces of several Governments to train the flying personnel in making parachute descents.



Pilot Chute in Container End of Pilot Chute stowed in container (upper left center) separated from parachute by pack flaps.

Pilot Chute

A small miniature parachute termed the "PILOT CHUTE" is attached at the peak or apex of the Air Chute by means of a separate silk cord of 500 pounds tensile strength.

The Pilot Chute is approximately 36 inches in diameter and is constructed with steel ribs and a spring in such a manner that it folds up under tension and is packed thus folded in the container. When the container is opened the Pilot Chute springs out, catches the air and holds the Air Chute out into the line of flight.

A long series of tests demonstrated that while the Pilot Chute is not essential to the successful operation of the Air Chute, it is an added safety feature. If the aviator be falling "free" through space, with the pack underneath his body when he pulls the Rip-Cord, the action of the Pilot Chute provides a positive means of deploying the Air Chute away from the body of the aviator, regardless of his position in the air, and thereby eliminates any chances of his falling into and becoming entangled with the Air Chute as it unfolds. The action of the Pilot Chute also permits emergency jumps to be safely made at extremely low altitudes.

The Instant After . . .

Just after pulling the Rip-Cord, showing how Pilot Chute quickly deploys

the parachute from the container.

15

Harn

The Air Chute is secured to the aviator by a substantial HARNESS which is the result of scientific development to not only assure sufficient strength but also to correctly distribute the opening shock loading to the various parts of the body in just the proper proportions, and is reenforced at all vital parts. The harness is readily adjusted to fit the largest or smallest person and is so designed that no bodily injury can result to the aviator when the Air Chute is opened at high speed. This is not a matter of theory, but has been actually demonstrated a great many times in both emergency and premeditated jumps at the greatest speeds of modern aircraft.

The "QUICK-RELEASE" Harness has been developed for Naval aviators and others who may be forced into an emergency landing in water or other unusual situation which would necessitate instant removal of the complete parachute and harness. However, this type of harness has met with great favor from Army and commercial aviators. Parachutes equipped with this harness are easy to put on and take off; may be left in the seat of the airplanes at all times and attached to aviator after he seats himself.

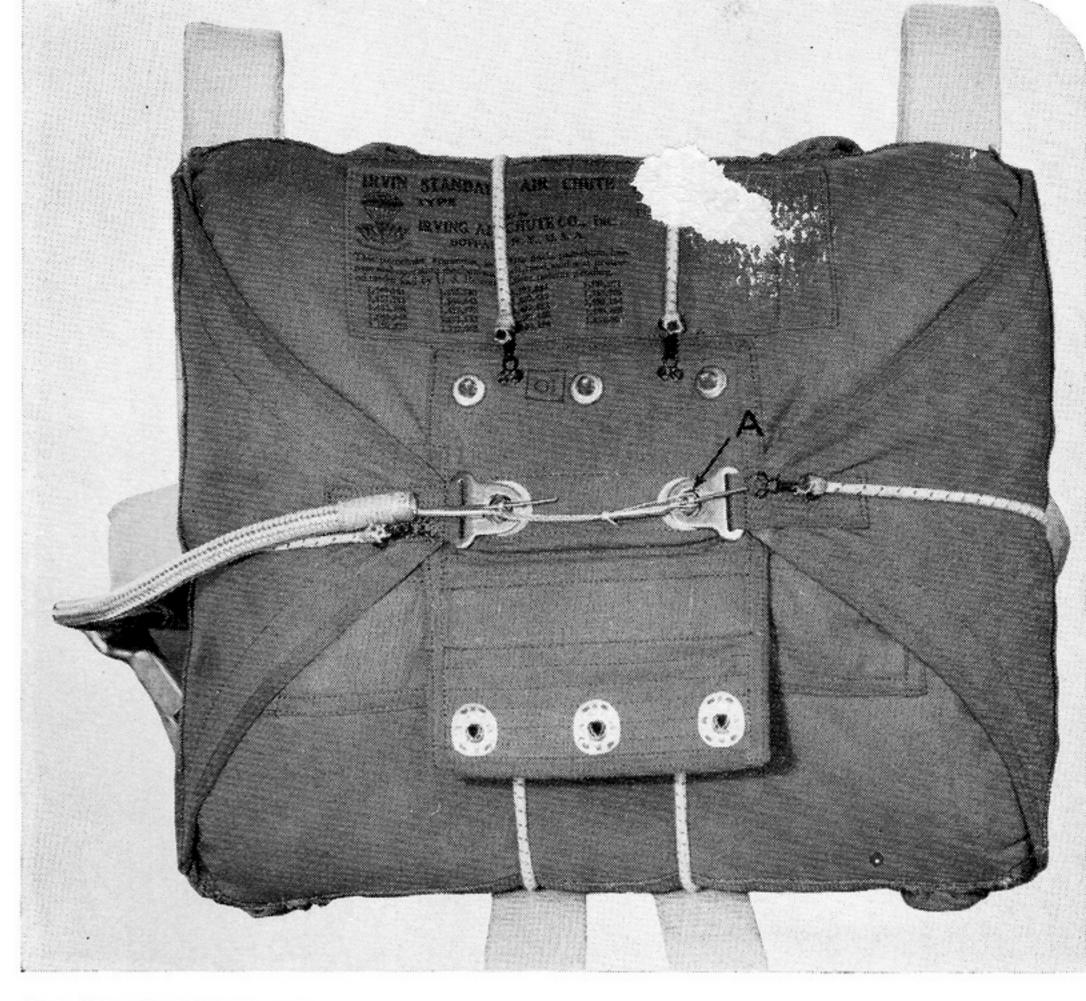
All the important features that make for safety and reliability in the IRVIN Standard Harness are retained in the Quick-Release Harness

by means of an ingenious arrangement of the leg and shoulder straps. These are releasably held together and locked in a central fitting worn in front of the aviator.

To release himself from the parachute and harness, the aviator turns the release disk 90 degrees, which unlocks the fitting. Pressure on the disk then instantly and simultaneously releases all the straps, and permits the harness and parachute to fall from the aviator. While the entire releasing operation is simple and easy, accidental release is impossible as the aviator must deliberately unlock the release disk before it becomes operative.

The results achieved by the IRVIN Quick-Release Harness, together with its combination of constructional features, have not heretofore been obtainable in any parachute harness. After exhaustive tests, the British Air Ministry and other governments have adopted this harness as standard. It is adapted to all IRVIN packs, and is offered as optional equipment.





Parachute Container . . .

Closed about the folded parachute just before the last packing operation of closing final protector flap over the locking pins on the end of the Rip-Cord.

Container

A great deal of experimental work has been carried on in the development of the CONTAINER or pack into which the IRVIN Air Chute is confined, making this the smallest, and simplest of any such equipment in existence. It is fitted with pockets in which to stow the suspension lines and keep them separated from the Air Chute, also with flaps to keep the Pilot Chute separated from the Air Chute.

The Air Chute is easily folded and packed in its container in a simple manner without special tools or equipment. The "RIP-CORD" which secures it in this container is a length of flexible cable with locking pins on one end and a steel ring on the other. The ring is secured in a pocket on the harness in a readily accessible place. Operation of the Air Chute is effected by a pull on the ring, which removes the locking pins from the container, allowing the Air Chute to free itself into the air immediately.

Packs

The five regular types of containers in which IRVIN Air Chutes are provided, are known as: "Seat Pack," "Straight Back Pack," "Form-Fitting Back Pack," "Quick-Connector Pack" and "Chair Chute". Detailed illustrations and descriptions of each are shown on following pages.



IRVIN Seat Pack, with Standard Harness; front view at left. Note "pull ring" at left side. At right, rear view. Note the natural and comfortable position in which the aviator sits on the pack of this type. The backpad automatically holds the harness in proper position.

SEAT Pack

The "SEAT PACK" is used as a seat cushion, thus removing all weight and bulk from the person of the aviator, and is the type in most general use for pilots and the one generally used as the standard equipment by the various government Air Forces.

In this type of pack, as in all others shown on succeeding pages, the Pack itself consists of a flat sheet of canvas, with two side flaps and two end flaps designed to close about the folded parachute. Attached to one side flap are two chrome plated brass cones with a pin hole through their apex (see illustration, "A" on preceding page). On the opposite side flap are two brass grommets, and on each end flap is a plated brass tab grommet. After the pack flaps are folded around the

parachute, the side flap grommets and the end flap tabs are placed over the cones, and the "Rip-Cord" locking pins are inserted through the pin holes in the cones, securely locking the pack flaps about the parachute. Elastic cords are then attached to each pack flap so that when the "Rip-Cord" is pulled 1½", all flaps are pulled from around the parachute, leaving it entirely exposed and free to deploy and open. The Pilot Chute, being the last into the pack, is the first out, springs free and pulls the parachute full length, peak first, in position to catch the air and open. The pack is reinforced in all vital parts with various sizes of special tapes and webbing, and has a spring steel wire frame in its bottom which keeps the one side next to the person in proper shape. The false bottom inclosing the wire frame has webbing "pocket" loops attached, into which the suspension lines are stowed in an orderly manner so that they pay out without twisting or snarling as the parachute deploys.

The various models and sizes of IRVIN packs vary in shape and appearance, but all are of the same general design and structure, and provide the same simple and positive operation.

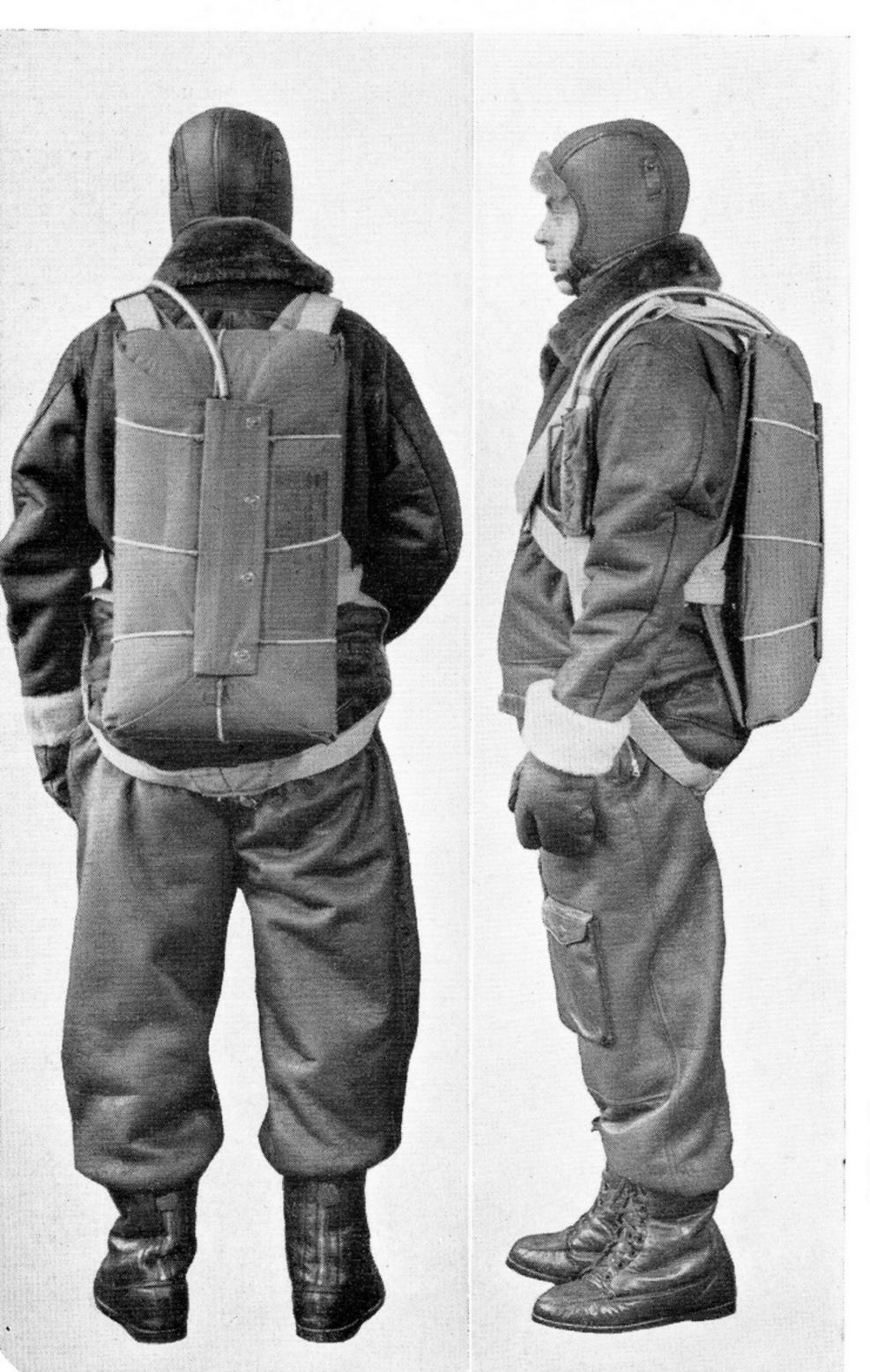


IRVIN Seat Pack, with "Quick-Release" Harness; rear view at left; side view at right.
Note simple, compact design of this harness, its comfortable adaption to the individual.

BACK Pack—Straight

The "BACK PACK," as its name implies is carried on the back, and is similar in construction to the seat pack, though being longer and narrower to fit the back. It is easier to get out of a small cockpit, or climb about an aircraft with a Back Pack than with a Seat Pack, and some aviators prefer it for greater comfort on long flights.

At the present time there is a growing tendency to consider these advantages of the Back Pack.



shown here with Standard Harness. In the side view, at right, note "Pull Ring" on left breast.

IRVIN Form-Fitting Back Pack. Note the extremely thin pack and snug fit to the aviator.



BACK Pack—Form-Fitting

The "FORM-FITTING BACK PACK" has been developed and perfected for use in aircraft where space is extremely limited.

Some types of open airplanes, both commercial and military, have very small cockpits from which it is easier to escape in emergency with a "form-fitting back pack" parachute. Still other types of open airplanes are so constructed that a "seat pack" parachute raises the pilot or passenger

too high for efficiency and comfortable flying.

These difficulties are overcome by the "Form-Fitting Back Pack" which is ideal for use in such airplanes. The pack frame is constructed from a special resilient spring steel wire, ingeniously formed so that the pack fits the contour of the wearer's back. The Air Chute is folded over a greater area, reducing thickness to a minimum, thereby permitting a more ready and easy escape from cramped quarters in emergency. The thin "Form-Fitting Pack" clings closely to the wearer's back and has no projecting corners or parts to catch on the aircraft when climbing from a small cockpit or through a small cabin door.

Like all other IRVIN Air Chutes, the "Form-Fitting Back Pack" has been so designed and engineered that it embodies all the patented safety features that have brought universal recognition to the IRVIN Air Chute as the standard aerial life-saving equipment of the world. It

operates in the usual simple way by a pull on the "Rip-Cord".



IRVIN "Quick-Connector" Pack

Front suspension type with Standard Harness.

QUICK - CONNECTOR Pack

The "QUICK-CONNECTOR PACK" has been developed and perfected to provide a safe and reliable life-saving means for passengers and pilots in cabin transport planes, rigid airships and other types of aircraft, the construction of which does not permit the wearing of a parachute while in flight. It is also used as a reserve pack for training purposes in some countries, and by exhibition jumpers.

It is likewise recommended for machine gunners or photographers who may be hampered in their work, by a pack on their person. The "Quick-Connector" harness can be comfortably worn by such persons without affecting their efficiency, the pack itself being placed in a readily accessible place, for immediate use, should emergency arise.

The maximum efficiency of a parachute is best obtained when it is worn on the person at all times while in flight, but when this is impossible, the "Quick-Connector Pack" offers the same protection that is enjoyed by users of Irvin Air Chutes in other types of aircraft.

With this equipment, the pilot or passenger wears only a comfortable harness while in flight. The Air Chute is carried separately and

readily accessible in the "Quick-Connector Pack", usually directly in front of, and above the pilot's or passenger's head or other instantly available point.

In emergency it is only necessary to grasp the pack and place it against the chest, where it is instantly and easily attached to the harness by means of a simple and ingenious connecting device, and the wearer is ready to jump. This connecting device provides for the attachment of the pack to the harness at two points. However, the Air Chute functions safely and perfectly when attached at only one point. Likewise, it functions safely and perfectly if the pack should be turned end-for-end before it is attached to the harness. After attachment the Air Chute is operated in the usual manner by a pull of the Rip-Cord.

The IRVIN Air Chute "Quick-Connector Pack" has been so engineered and perfected that it retains all the many safety features that are contained in other IRVIN Air Chutes. The entire apparatus is extremely simple and its method of attachment and operation is obvious at a glance, therefore no complicated or lengthy instructions for use are necessary. It has been adopted as standard equipment by the U. S. Navy, the British Air Ministry and other Government Air Forces.



IRVIN "Quick-Connector" Pack

Floating type with
"Quick-Release" Harness.





IRVIN
Training Outfit
(Left) with standard chest reserve
Pack. (Right)
with Quick - Connector reserve
Pack.

TRAINING OUTFIT

For training and exhibition jumps the Training Outfit, consisting of two Air Chutes on one harness, is now very generally used.

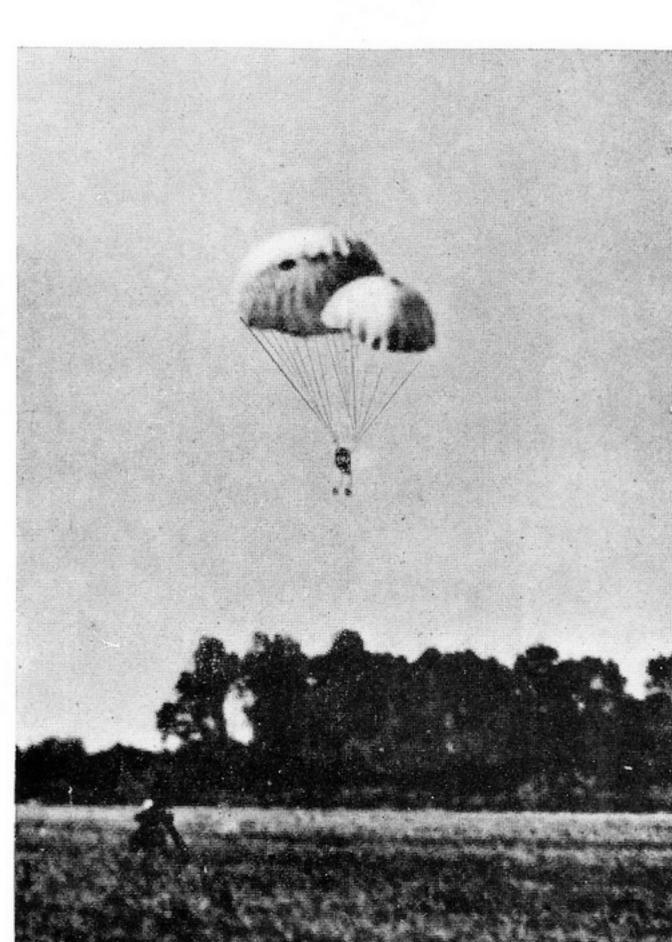
The Irvin Air Chute Standard Training Outfit is made up of a 28 ft. parachute in a Straight Back Pack, a 24 ft. parachute in a Chest Pack or a Quick-Connector Pack, and a Harness specially designed to accommodate the two Packs.

In use either Air Chute can be operated independently of the other, or they may be used together during descent.

The IRVIN Air Chute Training Outfit is used as standard equipment by the Air Forces of many Governments to train the flying personnel in making parachute descents.

In Descent . . .

When both packs of Training Outfit, are opened in practice jumps.





Cabin interior, looking aft, of the Stinson Model A, Tri-Motor Private Transport Plane of Mr. Richard J. Reynolds of Winston-Salem, N. C.

PLANE EQUIPMENT

-"Every Seat With a Chute"

Airplane manufacturers, as well as individual ship purchasers, are extended every cooperation by our engineering and production departments in working out the application of Irvin Air Chute equipment as they may desire. Our specialized experience in this field is making possible some unusually satisfactory results in installations of the most approved aerial life saving equipment in modern cabin planes, both new and those in service.

The custom-built Irvin Chair Chute is the unit around which such installations are designed. This has been developed to meet the most exacting requirements for refinement of out-of-sight safety, instantly at hand. It provides luxurious, deep-cushioned comfort without the necessity of wearing a harness except in an emergency and just before use.

Yet it should be realized that the Irvin Chair Chute is NOT merely a parachute pack which is substituted for existing chair packs in cabin ships. The Chair Chute is CUSTOM-BUILT into each individual chair and padded with a special material which provides a permanent, resilient cushion effect, completely disguising the presence of a parachute pack.

The chair is then upholstered with the same material used for the finish of the cabin. The Irvin Chair Chute is adaptable to any normal airplane chair, requiring no additional space. In addition it does not interfere with other features of the chair as supplied by the airplane manufacturers. Besides, it is available in any kind and color of upholstering.



CHAIR Chutes

For passengers in modern c..bin airplanes, the problem of instantly attaching parachute equipment in a manner at once convenient and comfortable to the wearer, has thus been solved by IRVIN engineering as shown by photographs on this and the opposite page.

The IRVIN Chair Chute with Lap Strap attachment, while particularly designed for women, is equally usable by men and is therefore applicable for general use in transport or cabin passenger planes.

All the characteristics of the original IRVIN Air Chute which has saved some 2,000 lives are embodied in the new IRVIN Chair Chute. Without sacrifice of beauty, comfort or practicability, this design represents a carefully engineered installation, especially adaptable for women's use.

This equipment has been so designed that it adapts itself to all normal airplane chairs, blending nicely with any style, decoration or color of upholstery. Meticulous care and skilled construction has produced a parachute installation which is so inconspicuous and occupies so little space that it appears to be nothing more than a comfortable back in

the chair. The complete IRVIN Chair Chute with harness, pad and chair fittings, adds but 16½ lbs. in weight.

This development, in keeping with the prestige of the Irving Air Chute Co., is one which we are justly proud to offer in the advancement of aviation.

At Top: IRVIN Chair Chute installed in comfortable, modern airplane cabin chair. Note that chute, while instantly available, is practically unnoticeable.

At Right: Woman passenger relaxing comfortably in airplane seat, equipped with IRVIN Chair Chute, ready for immediate use.





Fig. II Fig. III

INSTRUCTIONS - - -

Showing simplicity and ease of operation:

FIG. I: Pull out Side Straps and Pack from under hood. Caution: Do NOT take hold of Opening Handle, marked "H", Fig. II.

FIG. II: Place straps over shoulder: Snap Breast Strap together. Do NOT touch Opening Handle "H", until out of ship.

FIG. III: Fasten Lap Strap together and tighten as shown in Fig. III.—When you rise, Chute comes with you.

JUMP. When free of ship—pull Opening Handle "H" sharply—parachute opens instantly.

In normal flight passengers are oblivious to the presence of the Irvin Chair Chute which affords invisible protection for both passengers and pilots. Yet, if emergency suddenly confronts

them, they have a complete Irvin chute instantly at hand, easily and quickly put on, unassisted. If desired, however, the harness may be worn at all times while in flight with perfect comfort and without disarrangement of clothing.

In emergency passengers equipped with Irvin Chair Chutes merely follow the simple directions given above, arise from their seats and jump from the airplane as with ordinary air chutes. A pull on the Rip-Cord—and the Irvin does the rest.





Cabin Planes

Irvin Air Chutes are now available for most types of cabin airplanes -without sacrifice of comfort or appearance. No harness to wear except in emergencies. No unsightly packs cluttering up the cabin. Everything out of sight -yet instantly at hand if needed. Adapted to any type airplane chair or seat. Supplied in any color and kind of upholstering and custombuilt into seats of new or in-service planes.

These Irvin Chair Chutes embody all essential features of the standard Irvin Air Chutes that have been time-tried and service-proved the world over, and in emergency have saved over 2,000 lives.

IRVIN FACTORIES

Back of every Irvin Air Chute are the substantial facilities of the modern factories shown on the inside of the front cover and the following pages. In addition to these, other plants are now in process of construction at other points.

Every resource of efficient equipment adds to the technical effectiveness of Irvin manufacturing methods.

Over all, the personnel of Irvin Engineers includes men of the widest experience in the field of aerial life saving, men who are contributing now as they have in the past, the keen insight and constant study that make the Irvin Air Chute the leader, as well as the pioneer, of this industry.

California Factory-

Modern, daylight plant located at 1500 Flower St., Glendale, Calif.



IRVING AIR CHUTE OF GREAT BRITAIN LTD

English Factory-

Imposing structure of our British subsidiary at Letchworth, Herts, England.

Canadian Factory-

Factory recently completed to serve Canadian parachute needs at Ft. Erie, Ontario.

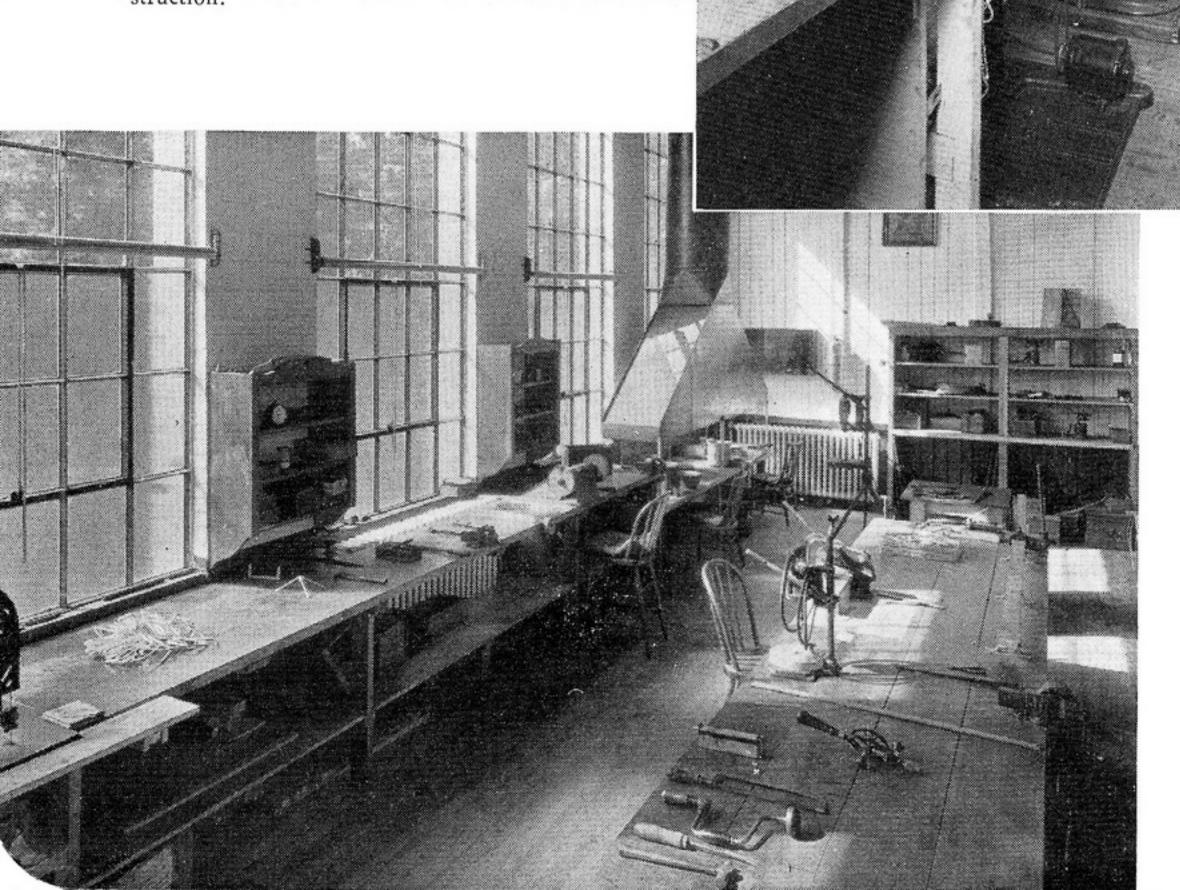


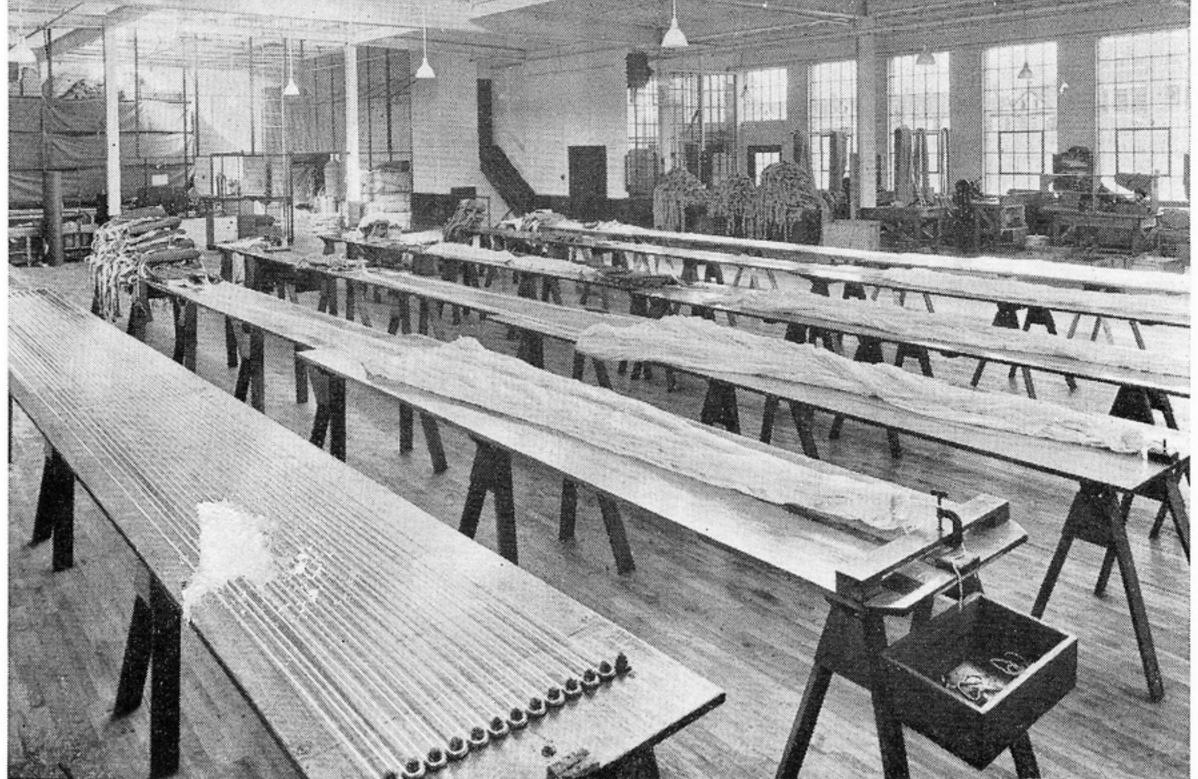


Servicing and Packing Department. Parachutes must here undergo the most rigid inspection before assembling for use.

Materials Testing Department. All parts which go into IRVIN air Chutes are tested with the intricate devices in this laboratory, before being approved for practical use.

Section of Metal Parts Fabricating Shop. All metal parts used in IRVIN construction are produced under the most exacting and efficient methods possible in modern construction.



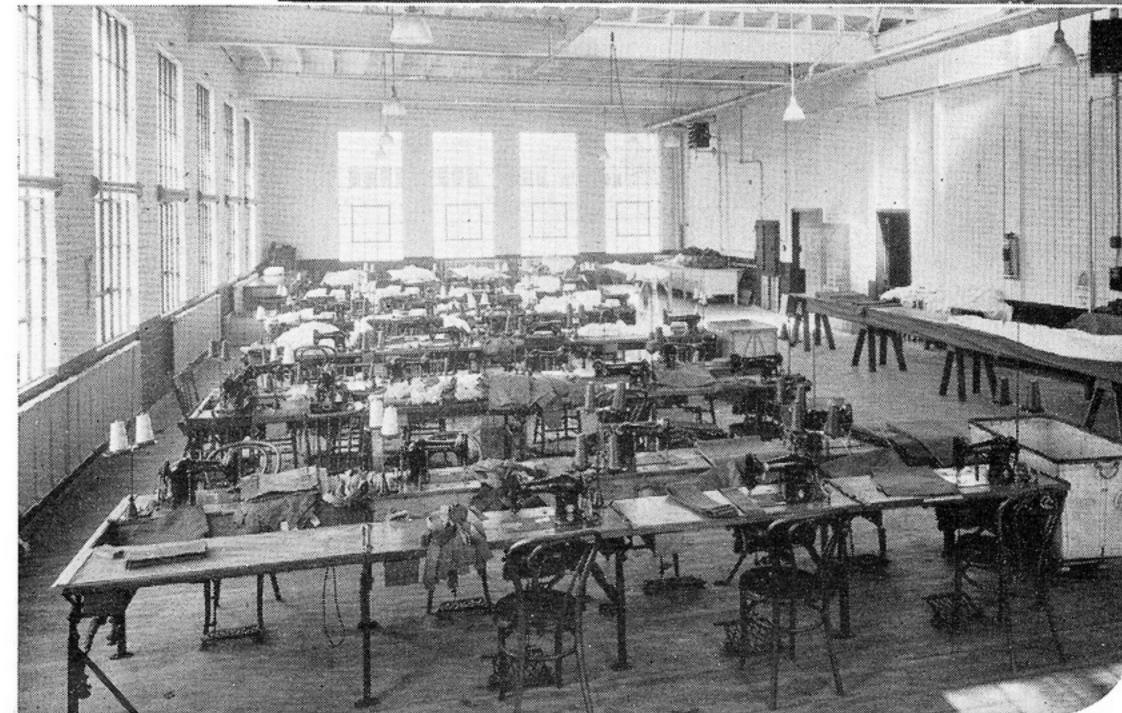


Cord-cutting, Harness and Rigging Benches in Main Assembly Room. Ample space assures the most efficient production.

Material Inspection Department. All materials used in IRVIN Air Chutes are passed through the Inspection Department where they must pass the most rigid reguirements, before being accepted for use.

Battery of Power Machines in Main Sewing Department. Greatest efficiency is assured in this large, modern, day-light production room of the world's largest parachute plant.







The IRVIN Air Chute takes its name from the pioneer work done in this field by Leslie Irvin.



LESLIE IRVIN, equipped with "Quick-Release" Harness and Seat Pack Type of IRVIN Air Chute. Note compact, close fitting design, which provides pack as a comfortable seat for pilot. Excessive bulk is eliminated thereby permitting quick escape from cramped cockpits or through small cabin doors. This harness has been adopted as standard equipment by the British Air Ministry, and is optional for general use.

Mr. Irvin has himself made over 100 descents with IRVIN Air Chutes.

"The Caterpillar Club"

Ing up around the heroic lives and pioneer work of those who fly, nothing holds more affectionate regard than the



thought back of the "Caterpillar Club" into which one qualifies as a member when, in an emergency his or her life has been saved by means of the IRVIN Air Chute. In this, the Caterpillar, letting itself down gently to earth on its silken shrouds, has been taken as symbolic of the action of this silken parachute. The names that follow are a partial list of members of this grateful organization.

Partial List of Lives Saved with IRVIN Air Chutes

Successful emergency use of the IRVIN AIR CHUTE has taken place in more than 38 countries, embracing every geographical, weather, atmospheric and emergency condition. Up to February 19, 1937, more than 2000 lives had been saved. Lack of complete data prohibits publication of a complete list here, however, a partial list follows. Those saved in the United States are presented first, after which the names are listed chronologically under heading of country in which saved.

UNITED STATES

HENRY WACKER

JOHN BOETTNER

Civilian

Civilian

1919

July 21

July 21

Chicago, Ill.

Chicago, Ill

1920
Aug. 24 WILLIAM O'CONNOR
McCook Field, Ohio Civilian
1922
Oct. 20 HAROLD R. HARRIS
McCook Field, Ohio 1st Lieut., U.S.A.C.
Nov. 11 FRANK B. TYNDALL
Seattle, Wa. 1st Lieut., U.S.A.C.
1924
April 23 WILFRED BOTTOMFIELD
Kelly Field, Texas Civilian
May 13 E. H. BARKSDALE
Fairfield, Ohio 1st Lieut., U.S.A.C.
June 5 W. W. WHITE
TT 11 box 1 c
Kelly Field, Texas 1ts Lieut., U.S.A.C.
Kelly Field, Texas 1ts Lieut., U.S.A.C. June 13 WALTER LEES
_
June 13 WALTER LEES Dayton, Ohio 2nd Lieut., O. R. C.
June 13 WALTER LEES Dayton, Ohio 2nd Lieut., O. R. C.

July 2 Pensacola, Fla.	S. E. INGERSOLL Lieut., U.S.N.
July 11 Kelly Field, Texas	A. R. CRAWFORD 2nd Lieut., U.S.A.C
Aug. 29 Bolling Field, D.C.	W. E. GOGGIN Private, U.S.A.C.
Aug. 29 Bolling Field, D.C.	L. L. KOONTZ 1st Lieut., U.S.A.C.
Oct. 16 Coronada, Cal.	W. M. COLES Gunner, U.S.N.
Nov. 4 Kelly Field, Texas	W. E. LYND 1st Lieut., U.S.A.C.
1925	
March 6 Kelly Field, Texas	C. D. McALLISTER 1st Lieut., U.S.A.C.
March 6 CHAR	LES A. LINDBERGH 2nd Lieut., U.S.A.C.R.
March 15 Marshall, Mo.	PAT MURPHY Civilian
March 20 Dayton, Ohio	FRANK D. HUNTER 1st Lieut., U.S.A.C.
April 6 Quantico, Va.	C. V. MIX Sgt., U.S.M.C.
April 10 Eaglesmere, Pa.	T. THAD JOHNSON 1st Lieut., U.S.A.C.
May 22 Lakehurst, N. J.	C. H. SHILDHAUER Lieut., U.S.N.

UNITED STATES (Continued)

June 2 CHARLES A. LINDBERGH St. Louis, Mo. 2nd Lieut., U.S.A.C.R. July 4 MRS. IRENE McFARLAND Cincinnati, Ohio Civilian Aug. 17 K. J. GREGG 2nd Lieut., U.S.A.C. Laverina, Texas Oct. 1 F. O. RODGERS Langley Field, Va. 1st Lieut., U.S.M.C Oct. 10 FRED C. NELSON St. Louis, Mo. 1st Lieut., U.S.A.C. Nov. 11 LEONARD S. FLO Dayton, Ohio 1st Lieut., U.S.A.C. Nov. 11 JOHN McGLYNN Dayton, Ohio Private, U.S.A.C.

1926

March 5 FRANK D. HUNTER Selfridge Field, Mich. 1st Lieut., U.S.A.C. March 24 E. H. BARKSDALE McCook Field, O. 1st Lieut., U.S.A.C. May 10 HORACE M. HICKAM Langley Field, Va. Major, U.S.A.C. May 10 HAROLD GEIGER Langley Field, Va. Major, U.S.A.C. June 2 S. E. INGERSOLL Pensacola, Fla. Lieut.. U.S.N. June 17 J. T. HUTCHINSON McCook Field, O. 1st Lieut., U.S.A.C June 17 PAUL STANLEY McCook Field, O. Civilian July 5 WALTER M. WILLIAMS Nashville, Tenn. Capt., Tenn. N. G. July 5 JOHN W. McKENZIE Nashville, Tenn. Lieut., Tenn. N. G. July 21 V. E. BERTRANDIAS Glenbourn, Md. 1st Lieut., U.S.A.C. Aug. 8 JOHN I. MOORE Austin, Texas 1st Lieut., U.S.A.C. Sept. 16 CHARLES A. LINDBERGH Cttawa, III. Pilot, Air Mail Sept. 17 C. L. WILLIAMS Honolulu, T. H. 1st Lieut., U.S.A.C. Sept. 26 H. E. LAFAYETTE Trenton, Mich. Civilian Nov. 3 CHARLES A. LINDBERGH Covell, Ill. Pilot, Air Mail Dec. 23 WARREN D. WILLIAMS Bowling Green, O. Pilot, Air Mail

1927

RODERICK M. KRIDER Jan. 18 Kelly Field, Texas Cadet, U.S.A.C. GEORGE T. SCHLEPPY Kelly Field, Texas Cadet, U.S.A.C. LAURENCE C. CRAIGLER Feb. 3 Brooks Field, Texas 1st Lieut., U.S.A.C. Feb. 3 FABRAIN L. PRATT Brooks Field. Tex. Capt. (MC), U.S.A.C. Feb. 15 CARL G. ASHLEY Galveston, Texas Private, U.S.A.C. O. M. DARLING Feb. 24 San Diego, Cal. Aviation Pilot, U.S.N.

March 28 E. B. WILKINS Augusta, Ga. Lieut., U.S.A.C. March 28 G. F. LAWHON Augusta, Ga. A.M.M., Ic., U.S.N. April 15 S. A. McCLELLAND Anacostia, D.C. 1st Lieut., U.S.M.C. April 27 S. W. TOWLE Champaign, Ill. 1st Lieut., U.S.A.C. May 4 HAWTHORNE C. GRAY Golden Gate, Ill. Capt., U.S.A.C. May 13 GEORGE G. FINCH Atlanta, Ga. 1st Lieut., U.S.A.C. May 28 B. M. BRIDGET Columbus, Ohio 1st Lieut., U.S.A.C. May 28 L. H. BRERETON Columbus, Ohio Major, U.S.A.C. May 28 F. P. MILLER Columbus, Ohio Sgt., U.S.A.C. May 28 G. M. TAYLOR Columbus, Ohio Sgt., U.S.A.C. June 20 E. A. PETERMAN Los Angeles, Cal. 1st Lieut., U.S.A.C. June 20 W. O. COOPER Capt., U.S.A.C. Los Angeles, Cal July 10 ART SMERTZ Salt Lake City, U. Civilian July 13 B. J. CRAYCRAFT Rantoul, Ill. R.O.T.C., U.S.A.C July 13 C. B. WHITNEY Salt Lake City, U. 1st Lieut., U.S.A.C. July 13 P. L. WOODRUFF Salt Lake City, U. Sgt., U.S.A.C. Aug. 15 ROBERT SEGER Morton Grove, Ill. Civilian Aug. 23 JOHN E. HEYWANG Lake Sebasticook, Me. Civilian VALENTINE GEPHART Sept. 16 Grampoin, Fla. Civilian Sept. 25 FRITZ H. GRIFNO Genoa, Texas Sgt., U.S.A.C. Oct. 5 A. H. GILKESON Edgewood Arsenal, Md. Major, U.S.A.C. Oct. 23 CHARLES R. BOWMAN Tehachapi Mts., Calif. Civilian F. C. SUTTON Oct 25 San Diego, Cal. Lieut., U.S.N. Oct. 27 J. D. CLEVELAND Kelly Field, Texas Cadet, U.S.A.C. Oct. 27 E. A. SANBORN Kelly Field, Texas Cadet, U.S.A.C. Nov. 9 D. H. STUART Norfolk, Va. 1st Lieut., U.S.A.C. Nov. 9 F P. MILLER Norfolk, Va. Staff Sgt., U.S.A.C. Nov. 9 A. B. JEWELL Norfolk, Va. Tech. Sgt., U.S.A.C. Nov. ERNEST E. DRYER New Mexico Civilian Dec. 12 GEORGE W. HANSON San Antonio, Texas Cadet, U.S.A.C. Dec. 25 JAMES RUTLEDGE San Francisco, Calif. Air Mail Pilot 1928 Jan. 21 GENE A. ALTHOFF

Civilian

Fairfield, O.

Jan. 24 AMBERSE BANKS Willow Grove, Pa. Air Mail Pilot Feb. 14 LOUIS M. BOURNE, JR. Quantico, Va. Major, U.S.M.C. ERNEST E. DRYER Feb. 28 Ypsilanti, Mich. Civilian March 23 WALTER C. GREEN Lieut., U.S.N. Quincy, Mass. March 24 SAMUEL G. COLWELL Lieut., U.S.N.R. Squantum, Mass. March 27 J. M. CARSON Pensacola, Fla. Ensign, U.S.N. JAMES RUTLEDGE March 27 Orindo, Calif. Air Mail Pilot BARNETT T. HALBOT April 6 Anacostia, D.C. Lieut., U.S.N. ARTHUR J. FRIES April 6 Civilian Dubuque, Ia. April 22 D. M. SWISHER Kelly Field, Texas Cadet, U.S.A.C. April 26 LAWRENCE J. CARR Clark Field, P.I. 1st Lieut., U.S.A.C. STANLEY UMSTEAD May 25 Mitchell Field, N. Y. 1st Lieut., U.S.A.C. May 27 AL WILSON Hollywood Hills, Calif. Civilian May 31 CARL K. WOLLAN Westmorland City, Ohio Civilan MAXWELL BALFOUR June 8 Mitchell Field, N. Y. 1st Lieut., U.S.A.C. JOHN A. McCORMICK Mitchell Field, N. Y. 1st Lieut., U.S.A.C. June 18 WILLIAM R. SHEPHARD Capristrano, Cal. Cadet, U.S.A.C. June 26 L. T. CLEAVES Vallejo, Cal. Ensign, U.S.N.R. WILLIAM L. CAMPBELL July 1 Kansas City, Mo. Capt., U.S.A.C.R RALPH C. WENSINGER July 4 Cleveland, Ohio Civilian E. C. EWEN July 17 Pensacola, Fla. Lieut., U.S.N. Aug. 3 WILLIAM J. CROSSWELL Kelly Field, Texas Cadet, U.S.A.C. Aug. 17 GEORGE E. K. MacKINSEY Bristol, Pa. Civilian Aug. 11 B. E. GATES Clarksburg, W. Va. 1st Lieut., U.S.A.C. RAYMOND L. WINN Aug. 13 Los Angeles, Cal. Cadet, U.S.A.C. Sept. 14 SHELDON C. YODER Kelly Field, Texas Cadet, U.S.A.C Sept. 14 H. W. PENNINGTON Galveston, Texas 1st Lieut., U.S.A.C. JEWELL S. WILSON Sept. 14 Galveston, Texas Pvt., U.S.A.C. Sept. 25 R. B. WILLIAMS San Diego, Cal. 1st Lieut., U.S.A.C. Oct. 21 FLOYD E. EVANS Detroit, Mich Major, Mich. Ntl. Guard EARL H. DeFORD Nov. 1 Morriston, Pa. Capt., U.S.A.C. Nov 1 RICHARD K. GAINES San Diego, Cal. Ensign, U.S.N.



MAJOR JAMES H. DOOLITTLE

Internationally famous aviator and holder of World's Speed Record, 1932, for land airplanes. His life has been saved twice by IRVIN Air Chutes.

Nov. 14 HARVEY F. DYER Brooks Field, Texas 2nd Lieut., U.S.A.C. Nov. 14 FRANK J. SIEBENALER Brooks Field, Texas Sgt., U.S.A.C. Nov. 18 PAUL COLLINS Brookville, Pa. Pilot Air Mail Nov. 22 RICHARD I. DUGAN Kelly Field, Texas Cadet, U.S.A.C Dec. 3 JAMES COLLINS Bolling Field, D.C. Civilian Dec. 4 STUART H. MURPHY Alamo, Cal. Civilian NORME D. FROST Dec. 4 Wheeler Field, T. H. 2nd Lieut., U.S.A.C. DANIEL BURNS Dec. 10 Kent, Ohio Civilian Dec 11 W. H. DOOLITTLE Selfridge Field, Mich. 1st Lt., U.S.A.C. Dec. 11 R. L. SCHOENLEIN Selfridge Field, Mich. 1st Lt., U.S.A.C. J. ORDWAY WEBSTER Dec. 17 Chicago, Ill. Pilot, Air Mail Dec. 31 KENNETH MEINARD Glendale, Cal. Civilian

1929

Jan. 26
Wright Field, Ohio 1st Lieut., U.S.A.C.

Jan. 30
Davenport, Ia.
Feb. 15
Selfridge Field, Mich. 1st Lt., U.S.A.C.

March 1
Alexandria, Va.

Julian B. Haddon
Ist Lieut., U.S.A.C.

Filot, Air Mail
W. L. MORGAN
Ist Lt., U.S.A.C.

TEMPLE JOYCE
Civilian

T. M. LOWE March 10 Brooks Field, Tex. 1st Lieut., U.S.A.C. CHARLES W. HOLMAN March 12 Minneapolis, Minn. Civilian March 16 JOHN H. TILTON Washington, D.C. 1st Lieut., U.S.A.C.R. March 22 S. J. SAMPSON Pilot, Air Mail Harmon, Ill. March 22 J. KANUIT Harmon, Ill. Pilot, Air Mail March 31 FRED ROULETTE Indianapolis, Ind. Sgt., Ind. Ntl. Guard WILLIAM WIMER April 14 Capt., Missouri Ntl. Guard Gumbo, Mo. May 18 A. F. SOLTER Wright Field, Ohio 2nd Lieut., U.S.A.C. May 23 A. S. KOCH Test Pilot Minneapolis, Minn. June 3 HAROLD NEUMANN San Diego, Cal. Seaman, U.S.N. LLOYD C. BLACKBURN June 3 Ft. Robinson, Nebr. 1st Lieut., U.S.A.C. LLOYD W. THACKER Ft. Robinson, Nebr. Staff Sgt., U.S.A.C. June 11 LEON S. ALLEN Philadelphia, Pa. Test Pilot June 13 FLOYD B. WOOD Kelly Field, Texas Cadet, U.S.A.C. June 18 CLINTON E. HERBERGER Los Angeles, Cal. 1st Lieut., U.S.A.C.R.



BJERA CHOOPRAYOON

Lieut., Royal Siamese Air Force Life saved with IRVIN Air Chute on September 22, 1931, when his plane interlocked with wing of another during aerial maneuvers.

June 22 LEE FLANAGIN Los Angeles, Cal. Civilian ALFRED BARRETT, Jr. June 23 Boston, Mass. Civilian P. M. CLYDE June 24 San Diego, Cal. Lieut., U.S.N. July 1 JAMES T. HUTCHINSON 1st Lieut., U.S.A.C. Honolulu, T.H. July 1 REUBEN C. MOFFAT Honolulu, T. H. 1st Lieut., U.S.A.C. RICHARD H. DEPEW, Jr. July 1 Civilian Johnstown, Pa. A. A. WOODRUFF July 1 Johnstown, Pa. Civilian July 6 EDDIE MARTIN Santa Anna, Cal. Civilian July 8 ALEXANDER P. KRAPISH Lowell, Mass. Civilian CHARLES GATCHET July 18 Des Moines, Ia. Civilian G. H. BEVERLEY July 20 Kansas City, Mo. 1st Lieut., U.S.A.C. BENJAMIN C. FIDDLER July 29 Riverside, Cal. Cadet, U.S.A.C. H. H. G'SELL July 30 Ensign, U.S.N. Pensacola, Fla. ROBERT A. WILLIAMS July 30 Pensacola, Fla. Sgt., U.S.M.C. July FRED PHILBRICK Civilian San Luis Obispo, Cal. Aug. 9 M. E. ZELLER Dearborn , Mich. Civilian JACK ADAMSON Aug. 11 Civilian Dayton, Ohio ROBERT W. GOETZ Aug. 12 Kelly Field, Texas Cadet, U.S.A.C. JULIUS A. BARR Aug. 12 Selfridge Field, Mich. 1st Lt., U.S.A.C. L. J. HOLUBEK Aug. 12 U. S. Dept. of Commerce Dallas, Texas Sept. 1 J. H. DOOLITTLE Cleveland, Ohio 1st Lieut., U.S.A.C. MISS FAY GILLIS Sept, 1 Valley Stream, N. Y. Civilian JOHN TRUNK Sept. 1 Valley Stream, N. Y. Civilian Sept. 2 DAVID H. YOUNG Columbus, Ohio Capt., U.S.A.C.R. GEORGE F. SCHUYLGEN Sept 4 Columbus, Ohio 1st Lieut., U.S.A.C. MRS. WAYNE H. FISHER Sept. 5 Columbus, Ohio Civilian Sept 11 T. S. POWER Langley Field, Va. 1st Lieut., U.S.A.C. Sept. 11 HARRY E. R. HALL Langley Field, Va. Civilian Sept. 16 ERRETT WILLIAMS Colorado Springs, Colo. Civilian Sept. 20 ARTHUR CENTER Springfield, Mass. Civilian

Sept. 20 J. E. BAKER Newport News, Va. 1st Lieut., U.S.A.C. Sept. 20 J. F. BENECKE Newport News, Va. Lieut., U.S.N. Sept. 21 DANIEL J. SMITH France Field, C.Z. Pvt., U.S A.C. Sept. 22 JOHN M. DONALDSON Birmingham, Ala 1st Lieut., U.S.A.C. Sept. 22 LUTHER N. JOHNSON Birmingham, Ala 1st Lieut., U.S.A.C. Sept. 24 DONALD B. PHILLIPS Nichols Field, P.I. 1st Lieut., U.S.A.C. Sept. 24 LAWRENCE R. HALL Nichols Field, P.I. Pvt., U.S.A.C. Sept. 24 HOWARD G. CROOP Nichols Field, P.I. Pvt., U.S.A.C. Sept. 25 J. P. DeSHAZO San Diego, Cal. Lieut., U.S.N. Sept. 27 HOWARD POYAS Los Angeles, Cal. Civilian Sept. 29 A. V. BUTTERFIELD Cincinnati, Ohio 2nd Lieut., U.S.A.C.R. Oct. 5 VIRGIL "TEX" RUSSELL Holland, Mich. Civilian Oct. 11 P. B. BALFOUR March Field, Cal. Cadet, U.S.A.C. Oct. 20 HARRY SEIVERS Pittsburgh, Pa. Civilian Oct. 21 JOHN SELIGMAN Freeport, N. Y. 1st Lieut., U.S.A.C. Nov. 1 E. H. DeFORD Langley Field, Va. Capt., U.S.A.C Nov. 4 LINDSAY M. BAWSEL Rantoul, Ill. 2nd Lieut., U.S.A.C. THOMAS P. NELSON Nov. 6 Ringtown, N. J. Pilot, Air Mail Nov. 7 JOHN M. PINCOMB Riverside, Cal. Cadet, U.S.A C. Nov. 7 JOSEPH A. ANDERSON Riverside, Cal. Cadet, U.S.A C. AUSTIN A. STRAUBEL Nov. 16 Mt. Clemens, Mich. 2nd Lieut., U.S.A.C. Nov. 20 ROBERT J. BAILIE New York, N. Y. Civilian Nov. 21 P. G. STEVENS Los Angeles, Cal. Civilian Nov. 24 LINDSAY M. BAWSEL Rantoul, Ill. 2nd Lieut., U.S.A.C. Nov. 25 EDGAR M. FOGGELSONGER Tuttle, Okla. 1st Lieut., U.S.A.C. Nov. 25 JOHN A. TARRO Tuttle, Okla. 2nd Lieut., U.S.A.C. Nov 25 JAMES W. McCAULEY Tuttle, Okla. 2nd Lieut., U.S.A.C. Nov. 25 WILLIAM J. MANSFIELD Tuttle, Okla. Mstr. Sgt., U.S.A.C. Dec. 4 J. M. GILLISPIE Goodwater, Ala. 1st Lieut., U.S.A.C. Dec. 4 D. M. CAPPS Goodwater, Ala. Staff Sgt., U.S.A.C. Dec. 4 R. A. BREMER Goodwater, Ala. Staff Sgt., U.S.A.C.



LIEUT. AMARILO V. CORTEZ Brazilian Army.

Life saved with IRVIN Air Chute near Rio de Janeiro on May 21, 1930, when his airplane failed structurally.

1930

Jan. 6 WILLIAM C. MILLS Galveston, Texas 2nd Lieut., U.S.A.C. Jan. 6 LINDSEY L. BRAXTON Galveston, Texas Sgt., U.S.A.C. GEORGE LAW Jan. 7 San Juna Pueblo, N. M. Civilian Feb. 16 ROY O. HUNT San Francisco, Cal. Civilian March 9 ROBERT P. DEUEL Dallas, Texas Civilian March 11 F. M. HOPKINS Chase, Md. 1st Lieut., U.S.A.C. March 11 A D. COOK Chase, Md. Pvt., U.S.A.C. March 11 A. H. DeWITT Kalamazoo, Mich Civilian March 27 PENNY ROGERS Wichita, Kansas Civilian STEPHEN R. SHORE March 27 Los Angeles, Cal. Civilian March 30 MILDRED KAUFFMAN Buffalo, N. Y. Civilian March 30 HARRY SIEVERS Warren, Ohio Civilian JAMES M. SHUTT April 2 Detroit, Mich. Civilian April 4 C. EUGENE SEARLE Detroit, Mich. Civilian April 10 HOWARD C. HARTUNG Detroit, Mich. Civilian April 10 FRANK C. SPANGLER Riverside, Cal. Cadet, U.S.A.C. April 12 STAFFORD L. LAMBERT Lieut., U.S.A.C.R. St. Louis, Mo.

UNITED	STATES	(Continued)
CHILED	DIALES	(Continued)

UNITED STATES (Continued)
April 12 HERBERT D. CONDIE St. Louis, Mo. Pvt., U.S.A.C.R.
April 12 HENRY MICHAELS San Mateo, Cal Civilian
April 12 WILLIAM F. DORMAN San Mateo, Cal. Civilian
April 22 CARROLL WARD Dallas, Texas Civilian
April 22 W. D. PHILLIPS Dallas, Texas Civilian
April 23 Sacramento, Cal. I. A. WOODRING 2nd Lieut., U.S.A.C.
April 26 HENRY I. BROWN Clearwater, Pa Pilot, Air Mail
May 2 Pittsburgh, Pa. C. H. PICKUP Civilian
May 2 Pittsburgh, Pa. D. ALLEN DITTMAN Civilian
May 2 Fresno, Cal. T. WASILEVICH Pvt., U.S.A.C.
May 8 Pine Bluff, Ark. J. O. DOCKERY Civilian
May 9 San Francisco, Cal. A. T. FROLICH Civilian
May 11 Green Bay, Wis. T. T. CHAPMAN, Jr. Civilian H. LYNN COWAN
Honolulu, T. H. Sgt., U.S.A.C. May 17 A. H. BILLSTROM
Houston, Texas Civilian May 18 ROBERT D. CHEW
Valley Stream, N. Y. May 19 San Antonio, Texas Civilian J. D. KREYSLER Cadet, U.S.A.C.
May 19 RICHARD J. DeLACEY San Diego, Cal. 1st Lieut., U.S.M.C.
May 19 San Antonio, Texas A. S. MERRIFIELD Cadet, U.S.A.C.
May 22 Langley Field, Va. 2nd Lieut., U.S.A.C.
May 24 Bedford, Ohio S. J. SAMSON Pilot, Air Mail May 26 EDWARD F. KIESSIG
San Angelo, Texas Cadet, U.S.A.C. May 30 LLOYD E. HUNT
Tipton, Okla. Cadet, U.S.A.C. May 30 JOSEPH A. BULGER
Sparta, Mo. 2nd Lieut., U.S.A.C. June 5 JOHN R. GLASCOCK
March Field, Cal 1st Lieut., U.S.A.C. June 9 LaVERE TREMBLAY Dallas, Texas Civilian
Dallas, Texas Civilian June 24 THOMAS G. FISHER San Diego, Cal. Lieut., U.S.N.
June 28 EILER C. SUNDORPH Cleveland, Ohio Civilian
June 28 JACK WEIS Cleveland, Ohio Civilian
July 11 C. B. SMITH St. Paul, Minn. Civilian
July 12 JOHN CHARLESON Mineola, N. Y. Civilian

July 13	EORGE WEHRUNG
Houston, Texas	Pvt., U.S.A.C.
July 15	L. D. MILLER
Omaha, Nebr.	Civilian
July 15	E. H. WHITE
Kelly Field, Texas	1st Lieut., U.S.A.C.
July 15 KA	RL G. E. GIMMLER
Hallettsville, Tex.	2nd Lieut., U.S.A.C.
July 15	FRANK J. SIROVIC
Hallettsville, Texas	Corp., U.S.A.C.
July 17	RAY J. SOLOMON
Los Angeles, Cal.	Civilian
July 17	WARD WELLS
Los Angeles, Cal.	Civilian
	LAND P. PEED, Jr. Civilian
July 17	R. S. ENSLOW
Monroe, Ga.	Civilian
July 17	JIMMY GARRIGAN
Monroe, Ga.	Civilian
July 22	F. H. SMITH 1st Lieut., U.S.A.C.
July 24	A. A. MARTY 1st Lieut., U.S.A.C.R.
July 24	J. W. McCRILLIS
Sacramento, Cal.	Capt., U.S.A.C.R.
July 24 C	HARLES H. KRUSE Capt., U.S.A.C.R.
July 24 FF	ANCIS M. GILBERT 2nd Lieut., U.S.A.C.R.
	H. S. WEAVER, Jr.
Aug. 4	JOHN G. FOWLER
Camp Knox, Ky.	2nd Lieut., U.S.A.C.
Aug. 5	ERIC WOOD
Westbury, N. Y.	Civilian
Aug. 5	LEONARD G. ROOF
Cleveland, Ohio	Civilian
Aug. 10	E. B. TWELLS
Chicago, Ill.	Civilian
Aug. 11	J. G. GOLDSBY
San Antonio, Texas	Cadet, U.S.A.C.
Aug. 13 Valley Stream, N.	HARRY ELLIS
Aug. 19	IRA C. EAKER
Washington, D. C.	Capt., U.S.A.C.
Aug. 22	J. E. RUSSELL
Burlington, Ia.	Civilian
Sept. 10	TED WELLS
Wichita, Kan.	Civilian
Sept. 24 MARIO	ON G. McCULLOUGH
Tulsa, Okla.	Civilian
Tulsa, Okla.	LD S. CHRISTENSON Civilian
Oct. 1	JOHN M. CROSS
Kansas City, Mo.	1st Lieut., U.S.A.C.R.
Oct. 1	JAMES E. PARKER
Dayton, Ohio	1st Lieut., U.S.A.C.
Oct. 2	M. J. SIMPSON
Coco Sodo, C. Z.	A.C.M.M., U.S.N.

CURTIS E. SMITH, Jr. Oct. 3 2nd Lieut., U.S.A.C.R. Deatsville, Ala. LAWRENCE A. DUNCAN Oct. 3 2nd Lieut., U.S.A.C.R. Deatsville, Ala. PATRICK W. TIMBERLAKE Oct. 9 France Field, C. Z. 1st Lieut., U.S.A.C. H. T. MERRILL Nov. 12 Civilian Shelby, N. C. FRED WELSH Nov. 14 Civilian Norton, Kan. JOHN L. MAGDEN Nov. 17 Kelly Field, Texas Cadet, U.S.A.C. ROBERT M. KRAFT Nov. 22 Mat er Field, Cal. 2nd Lieut., U.S.A.C. E. H. UNDERHILL Dec. 2 Lieut., U.S.A.C. Selfridge Field, Mich. L. O. RYAN Dec. 2 Selfridge Field, Mich. 1st Lieut., U.S.A.C. A. R. KINGHAM Dec. 8 Troy, Texas Cadet, U.S.A.C. LLOYD T. SCHREIBER Dec. 14 Seaman, U.S.N.R. Seattle, Wa. H. W. GALL Dec. 14 Civilian Seattle, Wash. ROBERT S. KERSTETTER Dec. 14 Mcrristown, Tenn. Civilian JOHN S. PRICER Dec. 15 · Civilian Evansville, Ind. M. B. GARDNER Dec. 18 San Pedro, Cal. Lieut., U.S.N. J. McHODGSON Dec. 18 Kelly Field, Texas Cadet, U.S.A.C. W. J. SCOTT Wheeler Field, T. H. 2nd Lieut., U.S.A.C. G. J. SLORP Dec. 22 Sgt., U.S.A.C. Wheeler Field, T. H. L. E. MASSIE Dec 22 Fort Riley, Kan. 2nd Lieut., U.S.A.C. J. W. LUDINGTON Dec. 22 Junction City, Kan. Pvt., U.S.A.C. LEWIS D. PARKER December Civilian Boston, Mass.

1931

WALTER HUNTER Sparta, Ill. Civilian Pilot A. W. DUKES Jan. 3 Winkleman, Ariz. Corp., U.S.A.C. WARREN H. HIGGINS Encinal, Texas 2nd Lieut., U.S.A.C. W. R. PODRAZA Jan. 8 Kelly Field, Texas Sgt., U.S.A.C. A. H. SANTA MARIA Jan. 11 Philadelphia, Pa. 2nd Lieut., U.S.A.C. H. W. REGAN Feb. 3 Kelly Field, Texas Cadet, U.S.A.C. HAYWOOD S. HANSELL Feb. 5 2nd Lieut., U.S.A.C. Black River, Va. C. D. FATOR Feb. 8 Whitewater, Cal. 1st Lieut., U.S.A.C. R. F. VANCE Feb. 27 Smith Field, N. C. 2nd Lieut., U.S.A.C.

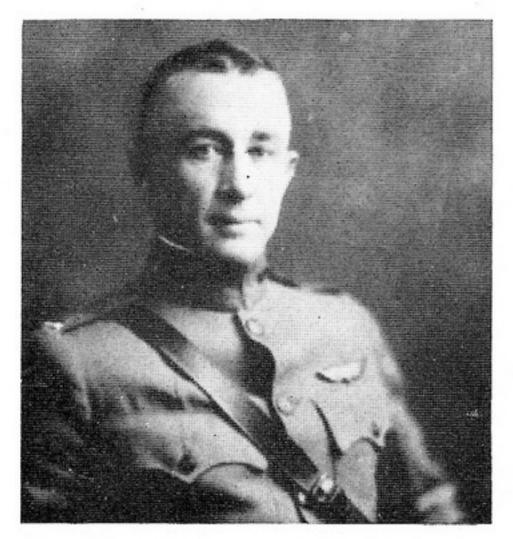


MISS MILDRED KAUFFMAN

Life saved with IRVIN Air Chute on March 30, 1930, at Buffalo, N. Y., when she slipped from safety belt when in inverted position while making loop.

S. O. ROSS March 10 Chanute Field, Ill. 1st Lieut., U.S.A.C. H. M. WILLIAMS March 10 Chanute Field, Ill. Pvt., U.S.A.C. R. C. W. BLESSLEY March 23 Selfridge Field, Mich. Capt., U.S.A.C. RICHARD F. HARDIN April 1 Santa Monica, Cal. Civilian JUSTIN C. FORD April 5 Bakersfield, Cal. Pvt., U.S.A.C. J. T. CUMBERPATCH April 5 Bakersfield, Cal. 1st Lieut., U.S.A.C. J. A. BRIER April 6 Kelly Field, Texas Cadet, U.S.A.C. PAUL E. HOVGARD April 13 Anacostia, D. C. Civilian CHARLES A. FRENCH April 13 Major, U.S.A.C. Morrison, Va. R. G. BREENE April 13 Morrison, Va. Capt., U.S.A.C. ANTHONY J. SIEKLICKI April 24 Mineola, N. Y. Civilian J. C. RICHARDSON April 28 Ft. Benning, Ga. Sgt., U.S.A.C. April 28 PETER HUBERT Chicago, Ill. Sgt., U.S.A.C. ERNEST K. WARBURTON April 29 Detroit, Mich. 2nd Lieut., U.S.A.C. J. K. CARIS May 12 Los Angeles, Cal. Civilian WILLIAM G. SWAN May 26 Atlantic City, N. J. Civilian HAROLD L. OSBORNE June 5 Chanute Field, Ill. Pvt., U.S.A.C.

June 6 WHITE KARL H. Robertson, Mo. Civilian June 9 ARTHUR R. KINGHAM Mather Field, Cal. 2nd Lt., U.S.A.C.R. June 23 J. H. DOOLITTLE Robertson, Mo. Major, U.S.A.C.R. June 27 ALBION S. HOWE Oakland, Cal. Civilian July 20 DAVE SPICER Sgt., U.S.A.C. Hartford, Conn. July 27 FRED J. O'NEIL Boston, Mass. U.S.A.C. July 27 O. P. PIERSON Boston, Mass. 2nd Lieut., U.S.A.C. Aug. 2 FREDERICK POSTAL Imlay City, Mich. Civilian Aug. 6 HARRY A. JOHNSON Mt. Clemens, Mich. 1st Lieut., U.S.A.C. KENNETH W. MOSHER Mt. Clemens, Mich. 2nd Lieut., U.S.A.C. ROBERT W. BURNS Mt. Clemens, Mich. 2nd Lieut., U.S.A.C. Aug. 10 DONALD E. MEADE Luke Field, T. H. 2nd Lieut., U.S.A.C. Aug. 10 JAMES D. KOONS Luke Field, T. H. Pvt., U.S.A.C. WILLIAM H. DaBOLL Cortland, N. Y. Civilian STANLEY M. VOSSLER Aug. 14 Cortland, N. Y. Civilian



LIEUT JOHN A. MacREADY U. S. Air Corps

Pilot on first New York to San Francisco non-stop flight.

Life saved with an IRVIN Air Chute on June 18, 1924, while making a flight when engine failed with no possible landing place.

WILLIAM F. DAY, Jr. Aug. 17 Mt. Clemens, Mich. 2nd Lieut., U.S.A.C. Aug. 23 JOSEPH WALKOS Mt. Clemens, Mich. Pvt., U.S.A.C. Aug. 30 WELDON E. RHOADES Wheeler Field, T. H. Lieut., U.S.A.C. Sept. 1 THAYER S. OLDS Cleveland, Ohio Lieut., U.S.A.C. Sept. 6 WALTER HUNTER Cleveland, Ohio Civilian Sept. 12 WILLIAM KELLY Philadelphia, Pa. Sgt., Pa. Nat'l Guard Sept. 12 H. R. BRINTON Brattleboro, Vt. Civilian Sept. 18 A. D. SWICK Flint, Mich. Civilian Sept. 21 JAMES G. HALL Staten Island, N. Y. Civilian Sept. 23 LEON McKENNON Bryan, Texas Civilian Sept. 25 R. W. FAIRINGTON Crissy Field, Cal. Pvt., U.S.A.C. Sept. 25 R. B. RICHARD Crissy Field, Cal. 2nd Lieut., U.S.A.C. Oct. 4 WESTON W. ADAMS Boston, Mass. Civilian Oct. 4 RUSSELL LOVEJOY Detroit, Mich. Civilian Oct. 15 JOHN V. KIPP St. Paul, Minn. 2nd Lieut., U.S.M.C.R. Oct. 19 HARRISON G. CROCKER 1st Lieut., U.S.A.C. Fairfield, Ohio Oct. 21 STANLEY J. JAVOS San Diego, Cal. Chief Av. Pilot, U.S.N. LLOYD L. JUELSON Oct. 28 Memphis, Tenn. Civilian Oct. 30 H. G. HOUGHTON, Jr. So. Dartmouth, Mass. Civilian Nov. 3 ERNEST H. BRISCOE Kelly Field, Texas Cadet, U.S.A.C. Nov. 28 MELVIN C. GARLOW Pittsburgh, Pa. Civilian Dec. 1 GENARO RIONDA Newark Bay, N. J. Civilian Dec. 8 WILLIAM S. GREY Mayfair, O. Civilian Dec. 13 R. J. SCANLON Greencastle, Ind. Civilian Dec. 15 DONALD N. YATES Randolph Field, Texas 2nd Lt., U.S.A.C. Dec. 16 JOHN H. DAVIES Honolulu, T. H. 2nd Lieut., U.S.A.C. Dec. 24 JAMES O. JOHNSON Bellefonte, Pa. Civilian

1932

Jan. 1 R. L. LEMCKE Los Angeles, Cal. Sgt., U.S.A.C.R. Jan. 1 A. A. LEMCKE Los Angeles, Cal. Civilian Jan. 4 NEAL E. AUSMAN France Field, C. Z. 2nd Lieut., U.S.A.C. Jan. 7 R. J. POTTER Kelly Field, Texas Cadet, U.S.A.C.

A. V. P. ANDERSON Nichols Fld., Rizal, P.I 2nd Lt., U.S.A.C. Jan. 15 W. O. RILEY Kelly Field, Texas Cadet, U.S.A.C. Jan. 28 W. B. WEBB Lawrence, Kan. Civilian Feb. 1 W. A. COCKE, Jr. Sequoia Nat. Pk., Calif. 2nd Lt., U.S.A.C. JAMES M. TREWEEK Sanderson, Texas Cadet, U.S.A.C. Feb. 21 EVEREST F. WAID El Paso, Texas Sgt., U.S.A.C. Feb. 21 JAMES D. RONIN El Paso, Texas 2nd Lieut., U.S.A.C. Feb. 23 RICHARD W. FRENCH Riverside, Cal. 2nd Lieut., U.S.A.C. Feb. 23 P. K. MORRILL, Jr. Corona, Calif. 2nd Lieut., U.S.A.C. Feb. 24 W. L. HAWKINS Oklahoma City, Okla. Civilian Feb. 24 L. T. DUTCHER Oklahoma City, Okla. Civilian March 21 ROLAND O. S. AKRE Langley Field, Va. 2nd Lieut., U.S.A.C. March 28 HAROLD KROW Denver, Colo. Civilian March 28 GEORGE TAYLOR Denver, Colo. Civilian R. C. McLAUGHLIN April 4 Utica, Mich. 1st Lieut., U.S.A.C. B. W. DAVIS April 8 Selfridge Field, Mich. 1st Lt., U.S.A.C. April 8 L. R. BLACK Selfridge Field, Mich. 1st Lt., U.S.A.C. April 15 W. H. ALEXANDER, Jr. Langley Field, Va. 1st Lieut., U.S.A.C. April 30 JOHN H. PATTERSON Boston, Mass. Capt., U.S.A.C. April CECIL W. DINGMAM Texas Capt., U.S.A.C. J. W. HUNT May 13 Yorkville, Ohio Capt., U.S.A.C.R. May 23 W. J. WALLACE San Diego, Cal. Capt., U.S.A.C May. 23 J. C. MUNN San Diego, Cal. Lieut., U.S.M.C. June 1 C. W. SOULE Cape May, N. J. Civilian June 2 H. M. McCOY New Haven, Mich. 1st Lieut., U.S.A.C. JOHN C. GORDON Randolph Field, Texas 1st Lt., U.S.A.C. HARRY E. CAMPBELL July 3 E. St. Louis, Ill. Civilian July 6 JOSEPH H. SWITLIK Belle Vernon, Pa. Civilian July 6 CARL C. LANGE Belle Vernon, Pa. Civilian July 8 . J. R. MERRITT March Field, Calif. U.S.A.C.,R.



LIEUT. HENRYKA PAWLICKI Polish Air Force.

Life saved with an IRVIN Air Chute at Torun, Poland, June 21, 1928, when his airplane went into a spin from which he was unable to regain control.

CHARLES HAAS July 12 San Luis Obispuo, Cal. 2nd Lt., U.S.A.C. July 12 R. H. HEBNER San Luis Obispuo, Cal. Pvt., U.S.A.C. CHARLES A. LUTZ Aug. 7 Bluefield, Va. Civilian Aug. 22 J. G. FOWLER Randolph Field, Texas 2nd Lt., U.S.A.C. J. J. KELLY Aug. 22 Randolph Field, Texas 1st Lt., U.S.A.C. LIONEL C. EDWARD Sept. 2 Selfridge Field, Mich. St. Agt., U.S.A.C. Sept. 2 EDW. R. RAWLINGS Fort Ringgold, Texas 2nd Lt., U.S.A.C. Sept. 16 FRANK LIPKE Mishawaka, Ind. Civilian GEORGE F. McDERMOTT Sept. 16 Randolph Field, Texas Cadet, U.S.A.C. Sept. 16 FRANK D. SINCLAIR Limon Bay, C. Z. 2nd Lieut., U.S.A.C.R. Sept. 24 KENNETH R. UNGER New Brunswick, N. J. Civilian Oct. 7 R. W. CLIFTON Scott Field, Ill. Sgt., U.S.A.C. Oct. 7 V. E. PRICHARD Scott Field, Ill. Major, Field Artillery Oct. 10 H. H. SARGENT, Jr. Charkmont, Mass. Civilian Oct. 10 OSCAR P. SUTTON Willoughby, Ohio Civilian

Oct. 21	MURL ESTES
Greenburg, Pa.	Air Mail Pilot
Oct. 27	E. H. RICE
Ft. Leavenworth,	Kan. Lieut., U.S.A.C.
Nov. 7	R. W. CLIFTON
Scott Field, Ill.	Staff Sgt., U.S.A.C.
Nov. 17	J. S. HOLMBERG
San Diego, Calif.	2nd Lieut., U.S.M.C.
Dec. 16	C. J. KING
Coronado, Cal.	Sgt., U.S.A.C.
Dec. 18	PARKER ABBOTT
Long Beach, Cal.	Lieut., U.S.M.C.R.

1933

Jan. 13 FRANK O'D. HUNTER Capt., U.S.A.C. Dayton, Ohio C. M. SARTAIN Jan. 17 Santa Monica, Cal. 2nd Lt., U.S.A.C.R. RALMOND D. ROBISON Jan. 19 Selfridge Fld., Mich. 2nd Lt., U.S.A.C., R. Jan. 20 MERRICK H. TRULY 2nd Lieut., U.S.A.C. Kelly Field, Texas Feb. 3 HARRY A. SUTTON Civilian Hamburg, N. Y. Feb. 9 RAYMOND D. ROBISON New Baltimore, M., 2nd Lt., U.S.A.C., R. Feb. 26 WALTER SEYERLE Cross Forks, Pa. Civilian Feb. 26 OTTO G. GLASS March Field, Calif. U.S.A.C. March 2 WM. S. GREEN Kansas City, Mo. Capt., U.S.A.C.R. March 9 ROY H. LYNN Cajon Pass, Calif. Lieut., U.S.A.C. March 12 RUTH E. DORSETT Civilian Ozark Mts., Mo.

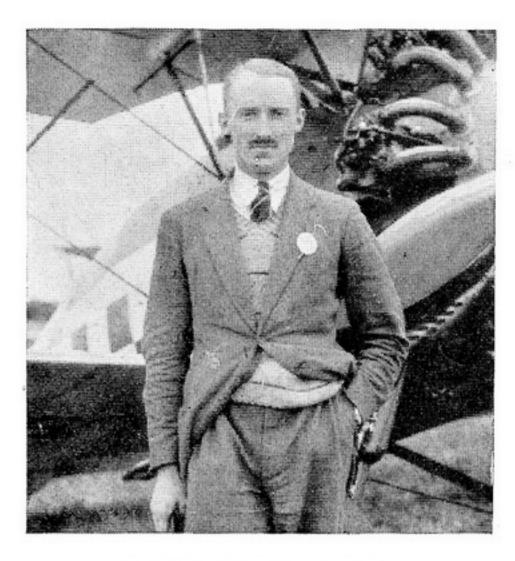


MAJOR LOUIS M. BOURNE, Jr. U. S. Marine Corps

Life saved with an IRVIN Air Chute on February 14, 1928, when his airplane was disabled in a severe electrical storm.

March 12	L. D. CRAWFORD
Ozark Mts., Mo.	Capt., U.S.A.C.R.
March 14	E. H. LAWSON
Albrook Field, C. Z.	Lieut., U.S.A.C.
March 17	L. S. FULWIDER
Kelly Field, Texas	Cadet, U.S.A.C.
March 21	P. B. KLEIN
Kelly Field, Texas	Cadet, U.S.A.C.
March 22	E. E. BASHAM
Conneaut, O.	Air Mail Pilot
April 13	A. J. McKEAN, Jr.
Luling, Texas	Civilian
April 14	VINCENT FORD
Riverside, Cal.	Lieut., U.S.A.C.
April 14 CHAF Riverside, Cal.	Lt., U.S.A.C.
April 17	PERCY L. HICKS
Raleigh, N. C.	Civilian
April 20	PAUL WATERMAN
Paxton, Ill.	2nd Lt., U.S.A.C R.
April 27	G. S. STEAD
Mitchell Field, N. Y.	Lt., U.S.A.C.R.
April 27	A. M. BANKS
Mitchell Field, N. Y.	Lt., U.S.A.C.R.
May 4 HOMER Kelly Field, Texas	A. BOUCHEY, Jr. Cadet, U.S.A.C.
May 5	H. S. WILLIAMS
Randolph Field, Texa	U.S.A.C
May 13	W. J. GRIFFITH
Manns Choice, Pa.	Air Mail Pilot
May 19	R. M. DAVIS
Luke Field, T. H.	Civilian
May 19	LOMA L. DYESS
Luke Field, T. H.	U.S.A.C.
May 25	JACK HERMAN
Hollister, Cal.	Civilian
May 25 Kelly Field, Texas	E. D. AVARY Cadet, U.S.A.C. W. M. ALTENBURG
Kelly Field, Texas	Cadet, U.S.A.C. ORMAN BURNETT
Lansing, Ill. June 12	Lieut., U.S.A.C. C. W. DeCUIR
	U.S.A.C.
Kelly Field, Texas July 16 Romulus, Mich.	ROBT. O. CARR Pvt., U.S.A.C.
July 22	J. G. COULTER
Council Bluffs, Iowa	Civilian
July 27	J. S. IRVINE
Kelly Field, Texas	Cadet, U.S.A.C.
Aug. 19	H. N. ROYSTER
Tulsa, Okla.	Civilian
Aug. 29 Randolph Field, Texa	
Sept. 6	J. C. COLGAN
Freehold, N. J.	Major, U.S.A.C.
Sept. 6	H. W. MARTENS
Freehold, N. J.	Pvt., U.S.A.C.
Sept. 6	J. K. LACEY
Hopewell, N. J.	Lieut., U.S.A.C.

Sept. 6 P. G. HUNTER Hopewell, N. J. Capt., U.S.A.C. Sept. 6 A. L. LOGAN Island Park, N. Y. Lieut., U.S.A.C. Sept. 6 E. P. WHITTAKER Island Park, N. Y. Pvt., U.S.A.C. HUNTER HARRIS, Jr. Sept. 8 Kelly Field, Texas Lieut., U.S.A.C. Sept. 8 W. D. MITCHELL Kelly Field, Texas Cadet, U.S.A.C. Oct. 6 EDWARD DORSEY 2nd Lieut., U.S.A.C.R. Gila Bend, Ariz. Oct. 9 WALLACE N. KEENE Maxwell Field, Ala. Pvt., U.S.A.C. F. K. PAUL Oct. 9 Langley Field, Va. Lieut., U.S.A.C. C. E. THOMAS Oct. 9 Montgomery, Ala. Lieut., U.S.A.C. Oct. 13 KENNETH GARDNER March Field, Cal. U.S.A.C. Oct. 13 J. E. CARTER March Field, Cal. Pvt., U.S.A.C.R. KENNETH RUSSELL Oct. 13 March Field, Cal. 1st Lieut., U.S.A.C. ROY HUNT Oct. 14 Civilian Wilmington, Del. FRED MONTAGUE Oct. 14 Cleveland, O. Civilian F. L. BROWN Nov. 1 San Diego, Cal. Pilot, U.S.N. Nov. 3 G. W. YOUNGERMAN Langley Field, Va. Lieut., U.S.A.C. ROBERT GAULT Nov. 8 U.S.A.C. Langley Field, Va. HARLAN HALL Nov. 11 Moriarity, N. M. Civilian JAMES INGRAM Nov. 21 El Paso, Texas Civilian L. A. TERRY Nov. 24 Cadet, U.S.A.C. Kelly Field, Texas ALLEN L. TERRY Nov. 24 Kelly Field, Texas Cadet, U.S.A.C. L. A. BROWN Nov. 24 Kelly Field, Texas Cadet, U.S.A.C. GENE BURFORD Dec. 11 Portage, Pa. Civilian Dec. 11 H. G. ANDREWS Portage, Pa. Civilian E. F. ALLEE Dec. 12 Bacon's Castle, Va. Lieut., U.S.A.C. Dec. 12 J. E. CARTER Tech. Sgt., U.S.A.C. Azusa, Calif. RANDLE W. ALCORN Mission Valley, Calif. Civilian KARL DAY Dec. 16 Wayne, Mich. Civilian Dec. 20 J. A. BULGER Balboa, C. Z. 2nd Lieut., U.S.A.C.



DAVID GREIG, D.F.C. Lieut., British Royal Air Force.

This famous British speed pilot saved his life with an IRVIN Air Chute when his airplane failed to respond to the controls after spinning more than 4000 feet.

1934

1004
Jan. 8 Pittsburgh, Pa. E. W. ANDERSON 1st Lieut., U.S.A.C.
Jan. 23 Langley Field, Va. MARTIN EDDY Sgt., U.S.A.C.
Jan. 23 Langley Field, Va. L. T. MILLER Corp., U.S.A.C.
Feb. 2 DONALD W. EISENHART Kelly Field, Texas Cadet, U.SA.C.
Feb. 13 Wheeler Field, T. H. R. E. BEEBE, Jr. 2nd Lt., U.S.A.C.
Feb. 13 C. H. ANDERSON New Baltimore, Mich. U.S.A.C.
Feb. 13 Wheeler Field, T. H. DEMAS B. CRAW Lieut., U.S.A.C.
Feb. 14 Oahn, T. H. A. G. GADEN Lieut., U.S.N.
Feb. 14 Oahn, T. H. W. L. GRUBER N.A.P., U.S.N.
Feb. 14 Oahn, T. H. C. P, MAY A.C.M.M., U.S.N.
Feb. 14 S. D. KAMRAR A.C.M.M., U.S.N.
Feb. 14 Oahn, T. H. T. P. GOLEY Aomic, U.S.N.
Mar. 20 VICTOR L. ANDERSON Kelly Field, Texas Cadet, U.SA.C.
April 3 DON H. BAXTER Lieut., U.S.A.C.
April 3 H. N. CRUMLEY Sunbury, Pa. Lieut., U.S.A.C.

UNITED STATES (Co	ntinued)
April 3 WI Sunbury, Pa.	Pvt., U.S.A.C.
April 3 Denver, Colo. L	c. L. REAVIS t. Com., U.S.A.C.R.
April 21 FR Kelly Field, Texas	ANCIS R. DRAKE Cadet, U.S.A.C.
May 2 Birmingham, Ala.	AMES O. FOSTER N.G., U.S.A.C.
May 5 Wichita, Kan.	DEED LEVY Civilian Test Pilot
May 6 Ironton, Mich.	J. C. BADER Civilian
May 6 ROI Ironton, Mich.	BERT MOORE, Jr. Civilian
May 7 Kelly Field, Texas	MORE V. MINNIS Cadet, U.S.A.C.
May 15 J. STAN Castronville, Tex.	The state of the s
May 15 WM Castronville, Tex.	M. M. MARKS, Jr. Cadet, U.S.A.C.
May 30 A Little Falls, Minn.	LBERT JACKSON Civilian
June 10 Dallas, Tex.	JACK A. BURKE Civilian
June 12 Hoffmans, N. Y.	ELY M. KINNEY Civilian
June 14 Buffalo, N. Y.	PAUL HOVGARD Civilian Test Pilot
June 24 HE Rutland, Vt.	RBERT H. MILLS Capt., U.S.A.C.
July 1 Ontonagon, Mich.	GORDON MYERS Civil.an
July 7 Montgomery, Ala.	J. M. TODD Lieut., U.S.A.C.
	ROBERT L. HALL conautical Engineer
July 13 Midway, Ohio	FRANK G. IRVIN 1st Lieut., U.S.A.C.
Brooklyn, N. Y.	RLES M. BOLDEN Civilian
Aug. 6 Luke Field, T. H.	Pvt., U.S.A.C.
Aug. 7 HF Atlanta, Ga. Aug. 7	Pvt., U.S.A.C. A. J. OLD
Barksdale Field, La. Aug. 10	Lieut., U.S.A.C.
Mooringsport, Ind. Aug. 20 SIDNE	Lieut., U.S.A.C.
Kelly Field, Texas 2 Aug. 31	2nd Lieut., U.S.A.C. W. F. MORRIS
Randolph Field, Texa Sept. 22	T. O. SIMMONS
Parksdale Field, La, Sept. 27 Cumberland, Ohio	J. M. TREWEEK Pvt., U.S.A.C.
Oct. 2	EDW. J. HALE 2nd Lieut., U.S.A.C.
Oct 2	F W OLMSTED

Oct. 2 Bishop, Calif.

Oct. 4 Browns, Ala. WARREN G. CARTER Capt., U.S.A.C.
Oct. 9 THOM. J. GANGEN Selfridge Field, Mich. Lieut., U.S.A.C.
Oct. 18 LEROY A. RAINEY 2nd Lt., U.S.A.C.
Oct. 18 ARTHUR PRESTRIDGE Pvt., U.S.A.C.
Nov. 5 Langley Field, Va. RODNEY E. JONES Cadet, U.S.A.C.
Nov. 6 Buffalo, N. Y. H. L. CHILDS Civilian Test Pilot
Nov. 6 EARLE G. HARPER Capt., U.S.A.C.
Nov. 6 Rantoul, Ill. J. E. DAILY Pvt., U.S.A.C.
Nov. 6 F. H. BERFIELD Pvt., U.S.A.C.
Nov. 6 W. E. BROWNING Rantoul, Ill. Civilian Instructor, U.S.A.C.
Nov. 8 J. T. FLOCK Kelly Field, Texas 1st Lieut., U.S.A.C.
Nov. 8 S. G. BANCROFT Everglades, Fla. Ensign, U.S.N.
Nov. 16 SHELLY CHARLES Civilian
Nov. 24 Diamond Bluff, Wis. C. L. SMITH U.S.A.C.R.
Dec. 12 Kelly Field, Texas A. G. EUBANKS Cadet, U.S.A.C.
Dec. 12 GEORGE S. BUCHANAN Kelly Field, Texas Cadet, U.S.A.C.
Dec. 14 F. L. ANDERSON San Francisco, Calif. Capt., U.S.A.C.
1935
Jan 8 E. W. ANDERSON
Pittsburgh, Pa. 1st Lieut., U.S.A.C. Jan. 11 C. W. WELMAN
Brookville, Ind. Corp., U.S.A.C.
Jan. 19 FRANK R. COOK Tucson, Ariz. Lieut., Air Reserve
Feb. 4 MAURICE GRAHAM
Grand Prairie, Texas Civilian
Feb. 7 W. A. TREMBLY New Braunfels, Texas Cadet, U.S.A.C.
Mar. 6 JOHN H. PRICE
Guys Store, Tex. Sgt. AM 1st Cl.A.C.
March 16 A. W. RADFORD Woodville, Texas Lieut. Comm., U.S.A.C.
April 4 J. F. GUILMARTIN
Colton, Calif. Cadet, U.S.A.C.
April 8 Norfolk, Va. A. B. THOMPSON Lieut., U.S.N.
April 8 A. G. HOLDEN Norfolk, Va. Lieut., U.S.N.
April 8 Norfolk, Va. J. HULME U.S.N.
April 14 THOMAS H. SMITH
Elkins, W. Va. Civilian

April 15 Ashland, Ky. W. C. McDONALD, Jr. Sgt., U.S.A.C.

F. W. OLMSTED Civilian

April 16 J. B. ACKERMAN 2nd Lieut., U.S.A.C. Kelly Field, Texas April 17 JOHN W. GREENE. Jr. Neponset River, Mass. Civilian LEE GEHLBACH May 6 Farmingdale, L. I., N. Y. Civilian E. P. HUNTER, JR. May 11 Albrook Field, C. Z. Lieut., U.S.A.C. May 15 MR. BILEL Civilian LEE GEHLBACH May 17 Near Dahlgren, Md. Civilian Test Pilot ERNEST PIERCY May 24 Boeing Field, Washington Civilain A. F. HEROLD June 2 Taylortown, La. Major, U.S.A.C. June 22 R. I. DUGAN Capt., U.S.A.C. Banning, Calif. R. GILES June 22 Banning, Calif. Sgt., U.S.A.C. F. H. MACDUFF June 22 Banning, Calif. Cadet, U.S.A.C. WM. A. MATHENY June 27 Tallahassee, Ala. Capt., U.S.A.C. FRANK B. SCHAEDE July 3 Lieut., U.S.N. Pensacola, Fla. July 4 CLYDE E. SHOCKLEY Muncie, Ind. Civilian GEORGE E. LEACH July 15 Chief, Nat. G. Bureau Seligman, Ariz. July 20 LYMAN DREW Tulsa, Okla. Civilian ROBERT CONOVER July 27 Brunswick, N. J. Civilian GEORGE W. WHITE Aug. 20 U.S.A.C. Watertown, N. Y. Sept. 5 JOHN L. BAILEY March Field, Calif. Sgt., U.S.A.C. Sept. 8 FRANK B. CONNOR Langley Field, Va. Corp., U.S.A.C. D'ANIEL C. MURDOCK Sept. 8 Langley Field, Va. Pvt., U.S.A.C. CHARLES A. JOHNS Sept. 8 Langley Field, Va. Sgt., U.S.A.C. Sept. 8 WILLIS S. MARVIN Langley Field, Va. Cadet, U.S.A.C. ALVAH E. KNIGHT Sept. 12 E. St. Louis, Mo. Civilian SAMUEL F. BROWN Sept. 15 Major, U.S.A.C. Langley Field, Va. Oct. 11 WILLIAM A. HATCHER March Field, Calif. 2nd Lt., U.S.A.C. Oct. 12 R. BAEZ, JR. Capt., U.S.A.C. Chillicothe, Ill. CARL W. HARTLEY Oct. 15 South Bend, Ill. Civilian FRANK T. CORBIN Oct. 23 Lieut., U.S.N. Pensacola, Fla. H. W. FISHER Nov. 10 U.S.A.C. Flemington, N. J. Nov. 19 NORME D. FROST Romeo, Mich Capt., U.S.A.C. Dec. 23 J. D. GREER Murfreesboro, Tenn. U. S. Weather Bureau Pilot



MISS FAY GILLIS

Life saved wih IRVIN Air Chute at Valley Stream, N. Y., on September 1, 1929.

1936	
Jan. 11	GEORGE L. BROWN
Pittsburgh, Pa.	Pvt., U.S.A.C.
Jan. 20	J. C. KELLEY
Wayne, Mich.	Test Pilot
Jan. 20	CY YOUNGLOVE
Wayne, Mich.	Test Pilot
Jan. 22	F. G. HUISH
San Antonio, Texas	Cadet, U.S.A.C.
Jan. 24	T. E. LANIGAN
Luke Field, Hawaii	Pvt., U.S.A.C.
Jan. 24 Luke Field, Hawaii	C. E. FISHER 2nd Lieut., U.S.A.C.
Feb. 7 New Braunfels, Te	W. A. TREMBLY Cadet, U.S.A.C.
Feb. 12	HARRY McHAYES
Atlanta, Ga.	Sgt., U.S.A.C.
Feb. 12	O. C. GEORGE
Stonewall, Ga.	Capt., U.S.A.C.
Feb. 12	R. B. EPLER
Stonewall, Ga.	1st Lt., U.S.A.C.
Feb. 12	G. RUSSELL
Stonewall, Ga.	Sgt., U.S.A.C.
Feb. 14	H. N. BURHALTER
Barksdale, Field, L	a. 2nd Lt., U.S.A.C.
Feb. 14	W. K. DURHAM
Mansfield, La.	Pvt., Q.M. Det.
Feb. 18	W. J. KLIFFEL
Sour Lake, Texas	Sgt., U.S.A.C.
Feb. 27	G. E. RICE
Florida	Lieut., U.S.A.C.

March 14 E. R. CAMP Colebrook Nat'l Guard Reservation, Pa. 2nd Lieut., Air Reserve Mar. 20 C. F. BOND Nacogodoches, Texas Major, U.S.A.C. March 30 J. B. WHEATLEY Langley Field, Va. Aero. Engineer W. H. MacAVOY March 30 Test Pilot Langley Field, Va. M. M. SIMMONDS April 9 Randolph Field, Texas 2nd Lt., U.S.A.C. JAMES A. PHILPOTT April 13 Mather Field, Calif. Cadet, U.S.A.C. April 20 H. T. McCORMICK Major, U.S.A.C. Elizabeth, Ind. FRANK J. BENNETT April 29 Donville, Va. 2nd Lt., Air Reserve May 3 FOSTER THOMAS Test Pilot Savanah, Ga. LEON E. SHARON May 8 Kewanee, Miss Capt., U.S.A.C. May 8 MALCOLM F. LINDSEY Kewanee, Miss. Major, Infantry JAMES L. BLEDSOE May 11 Flying Cadet DOUGLAS W. SMITH May 19 March Field, Calif. Flying Cadet T. A. WHITEHURST May 22 Hornsby, Tenn. Test Pilot May 23 JAMES L. MALONE Test Pilot Dayton, Ohio



PAUL AZCARATE Captain, Chief Test Pilot (Mexican Air Service)

Life saved with an IRVIN Air Chute on April 13, 1931, when controls failed to work at an altitude of 500 feet. May 27 W. W. McCONNELL Sycamore, Ohio 1st Lt., Air Reserve May 27 J. E. ALBERT 1st Lt., Air Reserve Sycamore, Ohio E. G. CARLISLE May 27 Brookville, Pa., Jefferson County Lieut., Pa. Nat'l Grd. May 27 C. G. CRAVEN Brookville, Pa., Jefferson County Lieut., Pa. Nt'l Grd. BYRON E. GATES June 4 Bedford, Ore. Major, U.S.A.C. CHAS. E. ROBBINS June 4 Bedford, Ore. Pvt., U.S.A.C. June 6 P. G. SMITH Syosset, L.I., N. Y. Staff Sgt., U.S.A.C. June 6 DALENE E. BAILEY Syosset, L.I., N. Y. Cadet, U.S.A.C. WM. B. WRIGHT June 7 Lt. Col., U.S.A.C. Town Hill, Ohio June 19 E. N BACKUS Nr. Barksdale Field, La. 2nd Lieut., Air Reserve CHAS. E. ROBERTSON June 22 Florida Student Naval Aviator July 2 JOHN R. VANEVERA Lieut., U.S.N. July 22 C. O. HOBSON Dunreith, Ind. Civilian JOHN CUTTING July 22 Dunreith, Ind. Civilian W. WM. CUMMINGS July 22 Dunreith, Ind. Civilian J. A. WEATHERFORD July 22 Dunreith, Ind. Civilian July 22 M. D. McDANIEL Dunreith, Ind. Civilian M. S. CRANFILL July 25 Denbigh, Va. Pvt., U.S.A.C. July 25 LLOYD EYRE Denbigh, Va. Flying Cadet, U.S.A.C. July 28 R. C. WOOD Kirby, Texas Flying Cadet, U.S.A.C. July 29 HOWARD H. PAVLAT San Diego, Calif. ACMM(NAP), U.S.N. Aug. 6 WALTER MULLER Luling, Texas U.S.A.C. Aug. 6 SGT. MALJEWSKI Luling, Texas U.S.A.C. Aug. 6 H. B. THATCHER Kelly Field, Texas Lt., U.S.A.C. Aug. 13 NORBERT D. FLINN New Kent, Va. Pvt., U.S.A.C. EDWARD F. KAYSER Aug. 20 Mitchel Field, N. Y. Pvt., U.S.A.C. Aug. 20 MICHAEL F. CYCON Mitchel Field, N. Y. Pvt., U.S.A.C. Aug. 25 TROY KEITH Kelly Field, Texas Cadet, U.S.A.C. Oct. 5 LOREN L. STRAW Kopowsin, Washington Pvt., U.S.A.C. Oct. 6 ROBERT H. PROCTOR Pensacola, Fla. Av. Cadet, U.S.N.

Oct. 11 SYLVA	N O. HUGELEN
Mason City, Iowa	Civilian
Oct. 23	F. W. EVANS
Philadelphia, Pa. AMI	M2c, U.S.N., Res.
Nov. 2	G. L. PENTZ
Loxley, Ala. Av.	
Nov. 17	ARTHUR ZENKE
T	Pvt., U.S.A.C.
Dec. 8 S.	R. PATTERSON
Kelly Field, Texas F	I. Cadet, U.S.A.C.
Dec. 14 HENLEY Houston, Texas	V. BASTIN, JR.
Dec. 14 STERLI	NG C HADVEY
Houston, Texas	Cadet. U.S.A.C.
Dec. 21 M. W. SC	CHOEPHOESTER
Randolph Field, Texas	
	Cadet, U.S.A.C.
Dec. 27	BEN ESTES
Mineral Wells, Texas	Civilian Pilot
Hadley Aiment N T.	O. RITTHALER
Hadley Airport, N. J.	Civilian
Crestview, Fla.	J. L. HAMMACK Pvt., U.S.A.C.
	B. W. CHIDLAW
Crestview, Fla.	Capt., U.S.A.C.
	oup., O.D.II.O.
1937	
Jan. 2 J	C. S. MOORMAN
Merrick, N. Y.	1st Lt., U.S.A.C.
Jan. 7 JOHN San Antonio, Texas	N C. KENNEDY
	Major, U.S.A.C.
San Antonio, Texas	E. McKESSON Lieut., U.S.A.C.
T 1 10	P. R. LEARNED
nr. Monroe, Ala.	Cadet, U.S.A.C.
Feb. 19	M. W. STELL
Pensacola, Fla.	Cadet, U.S.N.
ARGENTI	NF
1927	112

1927	ARGENTINE
Feb. 27 Buenos-Aires	HERBERT A. DARGUE Major, U.S.A.C.
Feb. 27 Buenos-Aires	ENNIS C. WHITEHEAD 1st Lieut., U.S.A.C.
April 12 La Rioha	GEN. AUGUSTIN JUSTO Minister of War
1935	
March 26 Argentina	JUAN F. FABRI Lieut.
1930	AUSTRALIA
May 15 Point Cook	W. G. RAE Pilot Officer, A.R.A.F.
1001	BELGIUM
1931	
July 2	M. DE CONINCH Adjutant, B.A.F.
1932	
Oct. 4 Liège	ROBERT WILMET Pilot, B.A.F.
Oct. 27 Diest.	F. LE GRANDE Capt., B.A.F.



U. S. Air Corps, O.R.C.

Life saved with an IRVIN Air Chute on June 13, 1924, when controls failed at the extremely low altitude of 150 feet.

1933	
Feb. 17	OSCAR BORISEWITZ Serg., B.A.F.
May 1	ADJUTANT SAUVENIERE B.A.F.
July	MARCEL HANSET Sgt., B.A.F.
July 27	E. TOLLET Capt., B.A.F.
July 27	M. VERMEULEN B.A.F.
Sept. 23 Ostend	CAPT. BESIN B.A.F.
Sept. 23 Ostend	COL. DESMENT B.A.F.
1934	
Feb. 9 Diest	LUCIEN THEYS Sgt., Belgian Air Force
April 23 Liège	LEOPOLD MOUZON Adj., Belgian Air Force
April 23 Liège	PHILIPPE JOMOUTON Lieut., Belgian Air Force
June 5	CAPT. D'HOORE Belgian Air Force
Aug. 23 Brussels	LEOPOLD MOWZON Adj., Belgian Air Force
Sept. 13 Tirlement	ADJ. PENSENDORFER Military Test Pilot
Dec. 14	SGT. VERLINDEN
1935	
July Belgium	V. MOREAU
July Belgium	ROY Sgt.

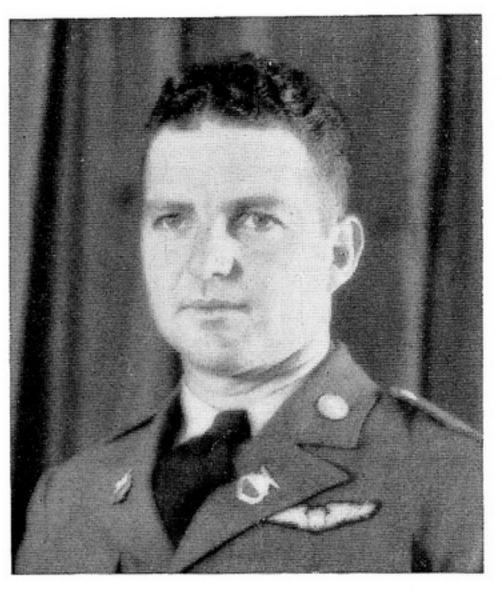
TANG PO SUN Sept. 2 Gapt. (2nd Jump) LOUIS CROOY Brussels, Belgium Sept. 2 MICHEL DE PRET ROOSE DE Schar, 2 MICHEL DE PRET ROOSE DE CALESBERG Adjutant Sept. 4 SIDORE CARYN Sept. 2 Gapt. (2nd Jump) Get. 8 Sept. 2 Gapt. (2nd Jump) Gapt. 8 Gapt. 2 Gapt. (2nd Jump) Gapt. 8 Gapt. 2	BELGIUM (Continued)	1933
Sept. 2 MICHEL DE PRET ROOSE DE CALESBERG Sept. 2 Sept. 3 Sept. 2 Sept. 3 Sept		
Sept. 2 MUGHEL DE PRET ROOSE DE CALESBERG Adutant (2nd Jump) Oct. 8 R. VERLAINE Set. Oct. 8 R. VERLAIN	Sept. 2 LOUIS CROOY	Sept. 13 TANG PAO SUN
Brussels, Belgium	Sept. 2 MICHEL DE PRET ROOSE DE	Oct. T. Y. HU
Sept. 4		1934
Severe	Sept. 4 ISIDORE CARYN Evere Adjutant (2nd Jump)	0 111
Section	G-4	
BOLIVIA BOLI	DOM:	May 22
BOLIVIA Sept. 2	G / /O 1 T	May 21 JIMMY LEE
BRAZIL BRAZIL BRAZIL BRAZIL 1930 May 21 AMARILIO VIEIRA CORTEZ Rio de Janeiro Lieut., B.N. 1933 Feb. 16 AUGUSTO RODRIGUES RENATO Campo dos Affonsos Lieut., B.A.A.S. CANADA 1929 May 17 CANADA 1929 May 17 May 20 CANADA 1934 Aug. 12 Havana Chief Instructor C.A.F. Oct. 3 W. J. MULLINS Guantanamo Bat, Cuba Lieut., U.S.A.C. 1935 Feb. 14 Guillermo S. GONZALEZ Havana, Cuba Lieut., Republic of Cuba Lieut., D.A.F. 1930 June 2 June 2 June 30 June 30 June 30 June 30 June 30 Copenhagen Lieut., P.A.F. 1931 Sept. 28 Cartagena CUBA 1934 Aug. 12 Havana Cuba Lieut., U.S.A.C. 1935 Feb. 14 GUILLERMO S. GONZALEZ Havana, Cuba Lieut., Republic of Cuba Lieut., D.A.F. 1927 June 30 Copenhagen Lieut., D.A.F. 1928 June 30 June 30 Copenhagen Lieut., D.A.F. 1938 HENRIK HARMS Copenhagen Lieut., D.A.F. 1934 Aug. 11 Copenhagen Lieut., D.A.F. 1934 Aug. 11 Copenhagen Lieut., Danish Air Force 1935 May 2 Lieut., Danish R.A.F. 1935 DUTCH EAST INDIES 1934 Aug. 12 June 30 Copenhagen Lieut., Danish R.A.F. 1935 May 2 July 26 E. C. BURTON Copenhagen Lieut., Danish R.A.F. 1935 May 2 July 26 Belleville, Ont. Flying Officer, C.R.A.F. (Res.) 1935 May 2 July 26 Belleville, Ont. Flying Officer, C.R.A.F. (Res.) 1935 May 2 July 26 Copenhagen Lieut., Danish Air Force 1935 May 2 Copenhagen Lieut., Danish R.A.F. 1936 Dec. 27 CHINA Belleville, Ord. 1934 Aug. 12 L. M. S. JACOBSEN Lieut., Danish R.A.F. 1935 Dec. 27 Lieut., Danish R.A.F. 1936 DUTCH EAST INDIES 1934 Mar. 14 F. F. W. VAN VELTHOOVEN Bandoeng Lieut., Royal Dutch Air Force 1930 Aug. 18 CHINA Ray 2 CHINA Ray 2 CHINA Ray 2 COPENHAGE Lieut., C.A.F. (Res.) 1925 Lieut., Danish R.A.F. 1936 Mar. 14 F. F. W. VAN VELTHOOVEN Bandoeng Lieut., Royal Dutch Air Force 1930 DUTCH EAST INDIES 1930 DUTCH EAST I	BOLIVIA	pra onon, onne
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1927 Aug. 18 ROBERT G. FREY Jan. 23 W. J. SOMERSET THOMAS	CLIMIA	FCVPT
		1930

Jan. 23	REV. K. C. H. WARNER
Ab Sueir	Chaplain, R.A.F.
1931	
May 18	W. R. FRASER
Ismailia	Sgt. Pilot, B.R.A.F.
May 18	D. J. PILCHER
Ismailia	Sgt. Pilot, R.A.F.
1935	
Sept. 23 Cairo	J. G. McARTHUR
Sept. 23 Cairo	T. CAMPBELL BLACK Capt.
Oct.	J. L. HALLEWELL
Port Said	Lieut., R.N.

	NGLAND
1926	
June 6	C. J. PENTLAND
London	Pilot Officer, R.A.F.
July 1	E. R. C. SHOLEFIELD
Weybridge, Chief	Test Pilot, Vickers, Ltd.
July 20	H. C. STEANES
Andover	Sgt., R.A.F.
July 20	W. J. FROST
Andover	Sgt., R.A.F.
July 21	W. J. FROST
Andover	Sgt., B.R.A.F
July 23	W. E. PARRISH
Ramsgate	Sgt., R.A.F.
	bgu, R.A.r.
April 22	DAVID GREIG, D.F.C.
Chelsham	Flt. Lieut., R.A.F.
May 25	G. W. TUTTLE
Hendon	Flying Officer. R.A.F.
Nov. 9	H. H. GREEN R.A.F.
1928	
Feb. 17 LEON	ARD ARTHUR WALSH
Folkstone	Flying Officer, R.A.F.
April 3 No. Weald	V. O. EYRE Flying Officer, R.A.F.
April 7	F. S. TROUT
Brentwood	Pilot Sgt., R.A.F.
Aug. 16	LESLIE C. BENNETT
London	Flying Officer, R.A.F.
Dec. 10 Cambridgeshire	EDWARD C. GAYLEY
	Flying Officer, R.A.F.
1929 Jan. 26	D C MILOMPRON
Grantham	P. G. THOMPSON Flying Officer, R.A.F.
Jan. 30	J. W. GILLAN
Diss, Norfolk	Flying Officer, R.A.F.
March 1	S. L. G. POPE
Yate Aerodrome	Flt. Lieut., R.A.F.
March 1	J. G. FREEMAN
Kenley	Sgt., R.A.F.
May 23	BONHAM CARTER
So. Farnborough	Flt. Lieut., R.A.F.
May 23	SCOTT HALL
So. Farnborough	R.A.F.
Tuno 10	D DADDOTT

June 10 Farnborough

June 11 Paddlesworth



WILLIAM C. McDONALD, Jr.
Sergeant, U. S. Air Corps.
Life saved with an IRVIN Air Chute
on April 15, 1935, when engine failed at
1,000 feet.

Aug. 13	G. W. PHILLIPS
Brantham	Pilot Officer, R.A.F.
Sept. 3	L. R. S. FREESTONE
Grantham	Pilot Officer, R.A.F.
Sept. 3 Grantham Sept. 4	A. A. FORBES Pilot Sgt., R.A.F. W. E. PRUDIN
Oct. 23 Digby Nov. 7	Flt. Lieut., R.A.F. B. PADDON Pilot Officer, R.A.F. R. S. COLLINS
Nov. 7 Kenley	Flying Officer, R.A.F. F. L. WHITE Sgt., R.A.F.
Nov. 29	C. R. L. SHAW
Bristol	Civilian
Dec. 22	DAVID F. McINTYRE
Glasgow, Scot.	Flying Officer, R.A.F.
1930	
Jan. 10	R. HUGH LITTLE
Grantham	R.A.F.
April 10	C. E. LITTLER
Cranwell	Flt. Cadet, R.A.F.
April 11	K. S. BRAKE
Chichester	Flying Officer, R.A.F.
April 11	J. H. PERCY
Chichester	Flying Officer, R.A.F.
April 17	V. KOBAYASHI
Hornchurch	Lieut., I.J.A.S.
April 22	SAMUEL R. GROOM
Chester	Flying Officer, R.A.F.
April 29	D. R. BYRNE
Hornchurch	Flying Officer, R.A.F.

R. BARBOUR Flt. Lieut., R.A.F.

F. D. TURNER Flying Officer, R.A.F.

ENGLAND (Continued)

May 1 N. S Digby	STRANGEWAYS LESMERE Pilot Officer, R.A.F.
June 4 Bristol	T. A. CAMPBELL Flying Officer, R.A.F.
June 6 Tangmere	D. R. C. HODSON Lieut., R.N.
June 6 Tangmere	W. F. BRYAN Corp., R.A.F.
June 6 Tangmere	J. E. ANNING R.A.F.
June 11	11.1.7.007.11
LORD	MALCOLM A. DOUGLAS- HAMILTON
Bicester	Pilot Officer, R.A.F.
June 11 Bicester	W. HAGAN L.Ac., R.A.F.
June 19	J. H. PERCY
Tangmere	Flying Officer, R.A.F.
Oct. 27	H. P. F. FAGAN
Wittering	Flying Officer, R.A.F.
1931	
Jan. 5 Bircham	HERBERT V. HUDSON Pilot Sgt., R.A.F.
Jan. 5	CHARLES H. MOLYNEUX
Bircham	Air Gunner, R.A.F.
March 9 Upavoh Witts	P. C. GINN Sgt. Pilot, R.A.F.
April 13 Essex	C. M. CHAMBERS Flying Officer, R.A.F.
May 6	E. R. ALEXANDER Observer, R.A.F.
May 7	E. S. B. CLARKE
Banbury	Flt. Lieut., R.A.F.



MILOS R. UZUNOVIC

Lieutenant, Yugoslavian Air Force. Life saved with an IRVIN Air Chute on September 27, 1934, when machine went into a back spin at low altitude.

May 7 W. H. KYLE Banbury Pilot Officer, R.A.F. May 7 K. L. M. DAVIS Aldershot Flying Officer, R.A.F. May 7 A. S. BLAKE Aldershot Sgt., R.A.F. K. G. WEIGHILL May 8 Flying Officer, R.A.F. May 13 E. D. GREEN Pilot Officer, R.A.F. Digby May 18 W. R. FRASER England L. Ae., R.A.F. May 18 D. J. PILCHER England Sgt. Pilot, R.A.F. June 2 D. O'BRIEN Ac 1, R.A.F. June 11 C. L. TAPLEY Digby Pilot Officer, R.A.F. June 11 R. W. OLDER Witby Ac., R.A.F. June 13 A. G. PICKERING Felixstowe Flt. Lieut., R.A.F. June 13 WOODWARD NUTT Felixstowe Civilian June 30 J. BRADLEY Cranwell Flt. Cadet, R.A.F. G. K. ST. O'MORRIS July 22 Flying Officer, R.A.F. Sealand Oct. 19 H. SETON BROUGHALL Suffolk 2nd Lieut., R. A. F. Oct. 26 R. D. OLDER Wilts L. Ac., R.A.F. Nov. 12 L. R. MOUATT London Flying Officer, R.A.F. 1932

March 10 Gasport March 11 Wilts April 27 Sussex May 26 Sussex June 8 Tangmere July 5 Suffolk July 18 Andover July 18 Andover Sept. 17 Kent Oct. 7 Guilford Oct. 7 Guilford Oct. 7 Guilford Oct. 7 Guilford Nov. 7 Waddington Dec. 21

R. G. O. S. TURNER Flying Officer, R.A.F. J. G. YOUNGHUSBAND Pilot Officer, R.A.F. E. D. JACK Pilot Sgt., R.A.F. G. J. S. CHATTERTON Flying Officer, R.A.F. J. T. WHITLEY Flt. Lieut., R.A.F. VIVIAN S. PARKER Flgt. Lt., R.A.F. T. C. TRAILL Flt. Lieut., R.A.F. N. A. CLEMO Corporal, R.A.F. F. R. DUNWORTH Flying Officer, R.A.F. F. E. BROOKS Corporal, R.A.F. W. H. QUANE L.Ac., R.A.F. G. H. RALPHS Ac. 1c., R.A.F. R. C. LEWIS Ac. 1c., R.A.F. C. MACKENZIE Ac., R.A.F. LESLIE F. BROWN Flying Officer, R.A.F.

Kent

1933
Feb. 20 A. M. ENGINEER Flgt. Cadet, R.A.F.
March 21 A. J. PEGG Suffolk Flying Officer, R.A.F.
April 11 R. R. NASH
May 19 Flgt. Lieut., R.A.F. JAMES F. MOIR Flgt. Lieut., R.A.F.
June 12 M. G. FRIESE-GREENE L. Ac., R.A.F.
June 12 A. C. DREW Flying Officer, R.A.F.
Sept. 11 S. STANILAND Lieut., R.A.F.
Nov. 23 Brooklands C. T. Pilot, Vickers, Ltd.
Nov. 23 Brooklands J. RADCLIFFE Engineer, Vickers, Ltd.
Nov. 23 Chadwell Heath Pilot Officer, R.A.F.
1934
Jan. 18 F. B. THOMPKINS Manchester Test Pilot, A. V. Roe
March 4 L. JOBBINS Romsey, Hants Pilot Sgt., R.A.F.
March 6 W. S. SOULE
March 11 W. Kent LeMAY
Filton, Bristol F/O R.A.F. (Reserve) March 27 A. E. FARMER
Eastchurch Sgt., R.A.F. May 5 H. B. CHESTER
Grantham F. O., R.A.F. May 5 R. MIDDLETON
Grantham Sgt., R.A.F. May 5 J. H. LEWIS
Grantham A.C.I., R.A.F. May 16 DONALD S. BROOKES
Merstham Flt. Lieut., R.A.F. May 16 A. D. W. WILLIS
Merstham Sgt., R.A.F. June 25 H. MACKENZIE KERR
Yate F/O, Bristol Test Pilot Aug. 21 H. J. PENROSE
Woodbridge Westland Chief Pilot
Southampton
Sept. 12 Farnborough D. M. HARRISON F/Lt., R.A.F.
Sept. 12 G. P. MARVIN Farnborough F/Lt., R.A.F.
Sept. 12 H. De C. A. WOODHOUSE Farnborough Pilot Officer, R.A.F.
Sept. 12 C. A. FIDDICK Farnborough Corp., R.A.F.
1935
May 20 Wealdstone, England P. W. JOHNSON Flight Officer
July 2 W A KIPKHAM

July 2

Cranwell, England



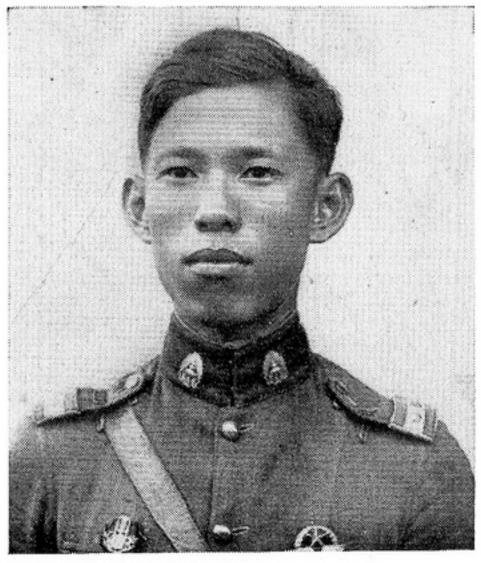
CAPTAIN ANTONIO JORDAN Polish Air Force

Life saved with an IRVIN Air Chute at Torun, near Warsaw, Poland, on May 30, 1928, when the controls of his airplane failed while engaged in aerobatics.

Aug. 16 A/P.O. J. M	IORGAN EVANS
England	R.A.F.
Aug. 24	C. E. SLEE
Colnbrook, England	R.A.F.
Oct. 21	W. I. C. INNES
Cranwell, England	Flight Cadet
Nov. 27 L. A. Wittering, England	C. MacDONALD
Dec. March Chapel, Lincs, E	LEX HENSHAW
1936	
Jan. 23	F. W. STENT
Twyford, Nr. Reading, 1	England
May 14	S. BOQUET
Sutton Bridge, England	Pilot Officer
June 9	A. RICHARDS
Aden	Pilot Officer
June 9 EDV	VARD GRAHAM
Aden	Pilot Officer
July 7	H. E. DAVIS
Snodland, England	Pilot, Sgt.
July 21	J. R. QUERTIER
Holton Camp, Aylesbury	, England
Aug. 26 RAYMONI Reading, England	J. SHELLARD
Oct. 7	H. F. BURTON
Navenby, Lincs, Englan	d Flight Cadet
Moorside, nr. Oldham,	D. J. M. KEYES England ing Aircraftsman

W. A. KIRKHAM

ENGLAND (Continued)
Dec. 12 C. P. VILLIERS Moorside, nr. Oldham, England Flight Lieut.
Dec. 12 JOHN McCANN Moorside, nr. Oldham, England
Dec. 12 TOMLIN Moorside, nr. Oldham, England Flight Officer
Dec. 19 Woodbridge, England WROATH Sgt.
FINLAND
1934
Jan. 29 Borga UUNO MAKELA Lt., Finnish Air Force
FRANCE
1935
Oct. 28 M. GUY DE CHATENBRUN France
GERMANY
1931
Sept. 28 GERHARD VOSS Berlin Civilian
1932
Sept. 21 HERR VON FLOTOW Braunschweig Civilian
July 7 HERR ERNEST UDET Templehof
1936
March 23 Germany THOENES Dipl. Ing.



NAM BHANDH NAGROB Lieut., Roval Siamese Air Force. First aviator in Siam to save his life with an IRVIN Air Chute (November 15, 1929).

GIBRALTER

	CIDICIALIZA
1 932	F. F. WHISTONDALE
Feb. 19	Flying Officer, R.A.F.
1936 June 30 Gibralter	J. N. GARNETT Lieut., R.N.
June 30	G. C. W. FOWLER
Gibralter	Lieut., R.N.
June 30	M. DERBYSHIRE
Gibralter	Telagraphist A/G

GREECE

	GREECE
1931	
June 19	G. FALCONAKIS
Athens	Lt. Comdr., G.A.F.
June 19	P. VANNOPOULS
Athens	Mech., G.A.F.
1932	
July 22	ORESTES STAMATION
Athens	Ensign, G.A.C.

HOLLAND

May 23 Holland	Lt.,	Dutch	BODAAN Reserve

1929	INDIA
Sept. 18 Risalpur	RONALD E. WATTS Flying Officer, R.A.F.
1930 Sept. 3 Agra	H. L. McCULLOCH Flying Officer, R.A.F.
Sept. 3 Agra	C. P. HANLON Flying Officer, R.A.F.
1 934 Dec. 4 India	A. E. PAISH Flight Lieut., R.A.F.
Dec. 4 India	H. KEEN 509975, L.A.C.
1936 Sept. 21	LA.C. J. H. BUNYAN

IRAQ

Peshawar, India

1930	- C 100 000 000 000
April 15	L. E. M. GILLMAN
Shaibah	Flt. Lt., R.A.F.
Sept. 3	H. L. McCULLOCH
Agra, Iraq	Fl. Off. R.A.F.
Sept. 3	C. P. HANLON
Agra, Iraq	Fl. Off. R.A.F.
Oct. 1	E. C. PASSMORE
Mosul	Flying Officer, R.A.F.
Oct. 1	A. C. BISHOP
Mosul	Flying Officer, R.A.F.
1 931 Jan. 30 Mosul	H. E. ROUS Pilot Sgt., R.A.F.
Jan. 30	A. CAMERON
Mosul	Ld. Aircraftsman, R.A.F.
June 5	C. G. R. LEWIS
Mosul	Pilot Sgt., R.A.F.
June 5	E. GROOMBRIDGE
Mosul	L. Ac., R.A.F.
Nov. 12	CHARLES E. GILROY
Mosul	Aircraftsman, R.A.F.

Dec. 11 Mosul	CHARLES E. GILROY Aircraftsman, R.A.F.	
1932 April 2 Mosul April 2 Mosul	H. W. WAYLEN Pilot Sgt., R.A.F G. W. BROWN Aircraftsman, R.A.F.	
JAPAN		
1928 June 13 Tokyo July 26 Tokyo August 22 Tokorazawa	S. NAKAO Civilian I. ISHIHARA Lieut., I.J.A. T. MIJASAWA Lieut., I.J.A.	
May 17 Tokyo June 11 Tokyo July 13 Mieken Oct. 9 Gifu Dec. 18 Tokyo Dec. 19 Taiwan	S. SAITOH Capt., I.J.A. Y. YOKOYAMA Lieut., I.J.A. K. HARADA Capt., I.J.A. Y. VAMASHITA Lieut., I.J.A. H. ODAWARA Lieut., I.J.A. G. YAMAMOTO Lieut., I.J.A.	
March 6 Chosen July 21 Karafuto July 21 Karafuto Aug. 22 Meiken Oct. 22 Gifu Nov. 21 Gifu	M. EYAMA Lieut., I.J.A. T. MIYAKE Capt., I.J.A. T. NONAKA Lieut., I.J.A. T. SATOH Lieut., I.J.A. CHOHME UI Sgt., Maj., I.J.A. KANBEI TANAKA Civilian	
Jan. 13 Chosen Jan. 13 Chosen April 8 Tokyo April 22 Tokyo	TOSHIO KATOH Capt., I.J.A. MASANAO ABE Sgt. Maj., I.J.A. MITSUYOSHI ITOH Pilot, I.J.A. TIZOH OKAMOTO Sailor, I.J.N.	
1936 Feb. 27 Bandoeng, Java	JAVA J. P. van HELSDINDEN Flight Lieut.	
1 934 June 28 Riga Marine	LATVIA ALEXANDER ZARINS Capt., Latvia Air Service	

MALTA

MEXICO

P. A. R. BREMRIDGE

JOE LOUTZEMHEISER

Fleet Air Arm Pilot

1st Lieut., U.S.A.C.

1934

Malta

1929

Aug. 27

Hermosillo

Feb. 12



RENATO AUGUSTO RODRIGUES

Lieut., Brazilian Army.

Life saved with an IRVIN Air Chute on February 16, 1933, when his airplane collided with another in mid-air above Rio de Janeiro.

April 10 CAPT. RAUL AZCARATE
Mexico City
April 13 CAPT. RAUL AZCARATE
Mexico City
Capt.
CAPT. RAUL AZCARATE
Chief Test Pilot

1936
Dec. 3 MARIANO MUNOZ PEREZ

NEW ZEALAND

1931 Jan. 9 G. W. E. CLANCEY Waikato Civilian

Capt. Flying Instructor

NICARAGUA

1931 March 24 JOHN P. GRANDO Ph. M.I.C., U.S.M.C. Managua JOHN C. TORIAN Ph. M. Ic., U.S.N. JOSEPH J. VLACH PFC., U.S.M.C. March 23 Managua March 24 Managua 1932 C. C. COFFMAN Aug. 21 Lieut., U.S.M.C. El Garabo R. R. TOWNSEND Aug. 21 El Garabo Lieut., U.S.M.C.

PALESTINE

Mexico

PANAMA

Sept. 19 EDW. N. HAMILTON Penonome, Pan. 2nd Lieut., U.S.A.C., R.

Nov. 20
Ocu, Rep. of Panama
Nov. 20
Cu, Rep. of Panama
Nov. 20
Cu, Rep. of Panama
Nov. 20
Cu, Rep. of Panama
Nov. 20
Sept. of Panama
Sept., U.S.A.C.

1936
May 12
N. R. TURNER
Penonome, Rep. of Panama

May 12 Pvt., U.S.A.C. W. A. KNIGHT Penonome, Rep. of Panama

May 12 Staff Sgt., U.S.A.C.
D. W. BENNER
Penonome, Rep. of Panama

June 30 JOHN W. KOMDT Bocas del Toro, Panama Pvt., U.S.A.C. June 30 ISAAC W. OTT Bocas del Toro, Panama 1st Lt., U.S.A.C.

POLAND

1928 May 30 Torun June 21 Torun

ANTONIO JORDAN
Pilot Officer, P.A.F.
HENRY PAWLICKI
Pilot Officer, P.A.F.
LEON OZORKLEWICZ
Sgt.,P.A.F.
KONRAD SADOWSKI
Lieut., P.A.F.



LIEUT. NILS SODERBERG Swedish Royal Air Force

Life saved with an IRVIN Air Chute on August 4, 1926, at Malmslatt Aerodrome, Linkoping, Sweden, when controls failed in a spin. MICHAL DLUTTO
Sgt., P.A.F.
JAN BALCER
Sgt., P.A.F.
CZESLAW LASKOWSKI
Corp., P.A.F.

Sgt., P.A.F.

1929

Dec. 22 STEFAN PAWLIKOWSKI
Capt., P.A.F.
KAZIMIERZ NIEDZWIEDZKI
Lieut., P.A.F.
EUGENJUSZ SACZEWSKI
Lieut., P.A.F.
STANISLAW MACEK
Corp., P.A.F.
HENRYK R. MOZDZEN
Sgt., P.A.F.
STANISLAW CHECKIEWICZ

1930

March 13

M. EDER
Pilot, P.A.F.

Dec. 6

Sknitow
Dec. 6

Sknitow
Dec. 6

Sknitow
Sknitow
Sknitow
Sknitow
Sknitow
Sgt. Pilot, P.A.F.

1931

July 6 MARJAN DYDZIUL

1932

Aug. 22 FRANCISZEK SKIBA Monasterzyska Pilot Observer, P.A.F.

1933

April 12 CHLOPIK TADEUSZ
Torun, Poland Pilot-Observer, P.A.F.
May 11 LADYSLAW USTYANOWSKI
Deblin, Poland Platoon Pilot, P.A.F.
Oct. 2 FELIKS GAZDA
Poland Polish Air Service

1934

April 19 THADDEUS LUKASZKIEWICZ Lwow Lieut., Polish Air Force April 19 THADDEUS NOWAK Lwow Sgt., Polish Air Force LADYSLAW USTYANOWSKI May 11 Polish Air Force Peblin May 30 KUSCK FRANCISZEK Lieut., Obs., Polish Air Force Premysl June 5 MALOROSWSKI ANDRZEJ Corp., Pilot, Polish Air Force Poznan July 6 MARJAN DYDZIUL Polish Air Service SOCHACKI BOLESLAW Aug. 22 Lwow Pilot, Polish Air Force HALICKI MIECSYTAW Aug. 22 Lwow Pilot, Polish Air Force OSUCHOWSKI ZBIGWIEW Aug. 22 Lwow Lieut., Obs., Polish Air Service Aug. 22 PEUTZ JOSEF Lwow Lieut., Obs., Polish Air Service 1936 May 28 ALEXANDER GABSZEWICZ

ROUMANIA

1934

Autumn Roumania Autumn Roumania

Grudziadz, Poland

CONSTANTINESCU Lieut. FRIM Engineer

2nd Lt., P.A.F.

1935 Sept. 12 Roumania Sept. 12

Roumania

A. POPISTEANU Capt. A. PAPANA Lieut.

SCOTLAND

1930 March 12 Glasgow, Scot. Oct. 21

EDWARD E. SMITH Mech., R.A.F. L. P. JAMISON Lieut., R.A.F.

1934

Fife

June 17 Fife

R. J. COOPER Lieut., R.N.

SIAM

1929

NAM BHANDH NAGROB Nov. 15 Changrad Lobburi Lieut., R.S.A.F.

1931

CHAROON KEIDSANAROJA March 4 Lance Corporal, R.S.A.F. Don Muang

1931

BJERA CHOOPRAYOON Sept. 22 Lieut., R.S.A.F.

1932

SAVAI CHANTARANGSRI Nov. 24 Corp., R.S.A.F. Donmung

1934

SANIT SAENGBANDHU June 7 Bangkok Corp., Royal Siamese Air Force

SOUTH AFRICA

1931

G. A. KING March 21 Cadet, S.A.A.F. Pretoria

1932

P. SKEAD Oct. 1 Lieut., S.A.A.F.

1935

C. S. LEISEGANG Nov. 4 Irene, So. Africa Cadet

SPAIN

1930

ALEJANDRO GOMEZ S. July 4 Commandte, A.M.E. Guadalajara A. GOMEZ SPENCER July 4 July 12 ANTONIO MELENDRERAS S. Lieut., A.M.E. Los Alcazarea AUGUSTIN GOBART L. Nov. 14 Cuatro Viento Lieut., A.M.E. Nov. 14 BUENAVENTURA PEREZ P. Lieut., A.M.E. Cuatro Viento

1931

RAMON RODRIGUEZ A. June 12 Aerodrome Leon Capt., A.M.E. ENRIQUE GARDENAS R. June 12 Lieut., A.M.E. Aerodrome Leon June 27 ANTONIO PEREZ DEL CAMINO Capt., A.M.E. Tetman MANUEL ROJAS S. July 21 Sub-Officer, A.M.E. Tarragona JULIO HERNANDEZ L. July 21 Tarragonna Sgt., A.M.E.



NURI OLMEZ

Lieutenant, Turkish Air Force.

Life saved with an IRVIN Air Chute on October 20, 1934, when his airplane collided with an other in mid-air.

Oct. 6 A. G. SPENCER Spain Commander TABOADA S. Oct. 6 GONZALO Guadalajara Capt., A.M.E.

1932

Feb. 5 ANASTASIO FERNANDEZ Mech. Montador, A.M.E. J. L. A. REYS April 19 N.C.O. Spain RAFAEL BELMONTE V. Sept. 9 Aerodrome Leon Sub-Official, A.M.E.

1934 M. G. PARDO April 11 Spain Lieut. Aug. 23 LUIS LERIN Madrid, Spain Aircraftsman Aug. 23 MANUEL G. LANZAS 2nd Lieut., A.C. Madrid, Spain Nov. 7 A. S. LARRAZA Spain Lieut. Nov. 7 F. M. URBANA Spain

1935 J. F. TUDELA Jan. 24 Saville Aerodrome Lieut. J. E. BALSALOBRE June 13 Lieut. F. A. ARENAS June 13 Banning, Calif. Cadet, U.S.A.C. June 24 RUIZSecond Lieut. Spain June 24 F. HERREROS Spain Sergeant

SWEDEN

1926 NILS SODERBERG Aug. 4 Malmslatt Lieut., S.R.A.F.

1928	YUGOSLAVIA
July 4 B. A. SJOBY	1929
Malmslatt Lieut., S.R.A.F. Aug. 14 N. G. E. BILLING	M. S. NOVAKOVICH Lieut., R.Y.A.
Stockholm Lieut., S.R.A.F.	1930
Dec. 7 FURIR CLAES BUREN	March 18 LIEUT. SKOJLJE
Ljungbyhed S.R.A.F.	Novakoich R.Y.A.
1930	May 15 BALANC L. STANISLAV Belgrade Capt., R.Y.A.
April 26 B. E. BEHN	May 21 IVO OSTRICH
Stockholm S.R.A.F.	Lieut., R.Y.A.
Sept. 11 A. J. HENRIKSON Stockholm Lieut., S.R.A.F.	May 22 FRANC F. PIRC
	Belgrade Capt., R.Y.A. Aug. 30 AUGUST NERMAH
March 24 B. G. E. BJUGGREN	Novi Sad Sub-Lieut., R.Y.A.
March 24 B. G. E. BJUGGREN P.F.C., U.S.A.C.	Aug. 30 DRAGUTEN DOLANSKI
Aug. 11 T. C. LINDEN	Novi Sad Lieut., R.Y.A.
Malmslatt Lieut., S.R.A.F.	Sept. 11 DROY VICOLITCH Lenvun Reserve Officer, R.Y.A.
Sept. 1 L. G. H. THUNBERG	
Ljungbyhed Lieut., S.R.A.F. Nov. 23 K. PALANDER	1931 Moveb 10
Malmslatt Civilian	March 10 SCHERUGA ALOJS Mostra Sgt., R.Y.A.
1933	June 10 R. DEYANOVITCH
July 7 H. VON SCHINKEL	Belgrade Sgt., R.Y.A.
Lieut., S.A.F.	June 26 R. MILOVANOVICH
1934	Mostra Sgt., R.Y.A. July 8 MIRKO MIHAJLOVITCH
July 6 K. G. LINDNER	July 8 MIRKO MIHAJLOVITCH Mostra Lieut, R.Y.A.
Civilian	Aug. 17 DIMITRY LJUMOVICH
July 6 S. NORDBORG Civilian	Sgt. Pilot, R.Y.A.
1935	Aug. 30 LJUDEVIT AJICH Tagreh Lieut R.Y.A.
July 18 FURIR HENRIK SCHOLLIN	Tagreh Lieut., R.Y.A. Sept. 18 DRAGOSAR SIMONITCH
Sweden	River Drenin, Bosma Lieut., R.Y.A.
July 25 NILS SODERBERG	Sept. 18 MOMTCHILO PETROVICH
Malmstatt, Sweden Capt., S.A.F.	River Drenin, Bosma Lieut., R.Y.A.
July 31 OTTO LUNIALA Sweden Lieut.	1932
July 31 FALTVABEL J. TAULU	Jan. 22 DRAGOMIR LAZAREVICH
Sweden	Jan. 22 Lt. Pilot, R.Y.A. M. PETROVICH
Oct. 5 D. EDLUND	Jan. 22 M. PETROVICH Lt. Pilot, R.Y.A.
Ljungbyhed, Sweden Lieut.	1933
Oct. 5 S. LUNDBERG Llungbyhed, Sweden Furir	July 14 MATIJA KRANJZ
Brung by neut, bweden Furn	Ljubljana Sgt., R.Y.A. Sept. 7 IGNATZ SKELEETIJA
YIOGR (BYIOGY)	Mostra Lieut. Pilot, R.Y.A.
U.S.S.R. (RUSSIA)	1934
June 24 M. M. GROMOFF	June 5 LEONID BAJDAK
Moscow U.S.S.R. Air Service	Capt., Yugoslavia Air Force
1928	June 8 ALEXANDER J. STANOJEVICH
Aug. 20 V. PISARENKO	Zemun Yugoslavia Air Force
Moscow U.S.S.R. Air Service	July 14 RISTA KOSTICH Aug. 24 BOSKO R. STANOJLOVIC
1929	Sept. 4 LJUBOMIR PETROVICH
Aug 10 V. BUCHOLTZ	Sept. 22 JOVAN S. VUKEVIC
Moscow U.S.S.R. Air Service	Sept. 27 MILOS R. UZUNOVIC
1930	Novi Sad Lieut., Yugoslavia Air Force
April 15 ALEXANDER KRAVTZOFF	June 5 VLASTIMIR J. MATOVIC
Magaziri II C C D Ain Convice	THASTIMIK J. MATOVIC
Moscow U.S.S.R. Air Service	June 28 MILIVOJJ MURKOVIC
	June 28 MILIVOJJ MURKOVIC June 28 LUKSIC MIHOVILJ
TURKEY	June 28 LUKSIC MIHOVILJ July 26 RADMILOVIC DJORDJE
TURKEY	June 28 LUKSIC MIHOVILJ July 26 RADMILOVIC DJORDJE Sarajwo Yugoslavia
TURKEY	June 28 July 26 Sarajwo Aug. 9 LUKSIC MIHOVILJ RADMILOVIC DJORDJE Yugoslavia ARSENIJE BOLJEVIC
TURKEY 1933 Oct. 2 ARIF (BEY) HICKMENT Eskisehir 1st Lieut., T.A.F.	June 28 July 26 Sarajwo Aug. 9 Yugoslavia Yugoslavia Kapetan II
TURKEY 1933 Oct. 2 ARIF (BEY) HICKMENT	June 28 July 26 Sarajwo Aug. 9 Yugoslavia Augoslavia Angoslavia ARSENIJE Kapetan II
TURKEY 1933 Oct. 2 Eskisehir ARIF (BEY) HICKMENT 1st Lieut., T.A.F.	June 28 July 26 Sarajwo Aug. 9 Yugoslavia Yugoslavia Kapetan II
TURKEY 1933 Oct. 2 ARIF (BEY) HICKMENT Eskisehir 1st Lieut., T.A.F. 1934 Oct. 20 NOUREDDIN BEY	June 28 July 26 Sarajwo Aug. 9 Yugoslavia Aug. 9 Yugoslavia ARSENIJE Kapetan II 1936 April 8 SPADIJER N. MILE Sarajwo, Yugoslavia June 9 LJ J. JANCIC
TURKEY 1933 Oct. 2 Eskisehir 1st Lieut., T.A.F. 1934 Oct. 20 Diarbekin NOUREDDIN BEY Turkish Air Force	June 28 July 26 RADMILOVIC DJORDJE Sarajwo Aug. 9 Yugoslavia Aug. 9 Yugoslavia Kapetan II 1936 April 8 Spadijer N. Mile Sarajwo, Yugoslavia June 9 LJ J. JANCIC Pec, Yugoslavia
TURKEY 1933 Oct. 2 Eskisehir 1st Lieut., T.A.F. 1934 Oct. 20 Diarbekin NOUREDDIN BEY Turkish Air Force WEST INDIES	June 28 July 26 RADMILOVIC DJORDJE Sarajwo Aug. 9 Yugoslavia Aug. 9 ARSENIJE BOLJEVIC Yugoslavia Kapetan II 1936 April 8 Sarajwo, Yugoslavia June 9 LJ J. JANCIC Pec, Yugoslavia Nov. 28 MILIVOJ ZIZIC
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